

ATS 300 Mux

Release 22.100 - Oct 2016

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ADDED FUNCTIONS

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

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

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

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

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

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

- System

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

					<ul style="list-style-type: none"> - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4
2013/01 -	CPTA	1.4	140	Airbag Airbag AB 20 UDS	

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

2012/04
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CJSA

1.8

180

Airbag
Airbag AB 20 UDS

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

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

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

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

2012/04
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CRBC

2.0

150

Airbag
Airbag AB 20 UDS

value

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

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

2012/10
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CRLB

2.0

150

Airbag
Airbag AB 20 UDS

front

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

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

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

2013/05
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CUPA

2.0

184

Airbag
Airbag AB 20 UDS

Ohm value

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

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

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

2012/09
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CLHA

1.6

105

Airbag
Airbag AB 20 UDS

side:Ohm value

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

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

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

2012/10
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CRBC

2.0

150

Airbag
Airbag AB 20 UDS

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

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

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

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

2012/12
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CJZA

1.2

105

Airbag
Airbag AB 20 UDS

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

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

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

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

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

2012/09
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CRBC

2.0

150

Airbag
Airbag AB 20 UDS

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

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

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

2012/10 -	CRLB	2.0	150	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value
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				<ul style="list-style-type: none"> - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side 2 - Ignition circuit 2, belt tensioner, front passenger side • Actuators - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value

2013/03
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CRFC

2.0

143

Airbag
Airbag AB 20 UDS

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

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

side

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

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

2013/02

CRBC

2.0

150

Airbag
Airbag AB 20 UDS

value

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

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

2013/05 -	CJSB	1.8	180	Airbag Airbag AB 20 UDS	front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value
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- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side
- Ignition circuit 2, belt tensioner, front passenger

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

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

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

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

2013/05	CJZA	1.2	105	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status
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					<ul style="list-style-type: none"> - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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AUDI					A6 [4G2, C7] - A6 2.8 FSI quattro	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Pulse-wheel test - Actuator test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Reset brake temperature monitoring - Brake temperature monitoring information - Sensor unit zero position compensation - Reset puncture indicator • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Engine revolution - front left tire speed - front right tire speed - rare right tire speed 	

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

2010/11

CHVA

2.8

204

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

Cruise control
ACC 4.1

- **Current values**

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

- **Actuators**

- Lens heating actuation
- ACC lens adjustment

- **Identification**

- **Clear errors**

- **Adjustments / settings**

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

- **Special functions**

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

- **Error memory**

- **Current values**

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

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Underbody/Steering

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

Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

Cruise control
ACC 4.1

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

Cruise control
ACC 4.1

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

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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• **Current values**

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

ACC 4.1

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

• **Actuators**

- Lens heating actuation
- ACC lens adjustment

• **Identification**

• **Clear errors**

• **Adjustments / settings**

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

• **Special functions**

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

• **Error memory**

• **Current values**

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

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

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

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

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

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

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

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

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

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

• **Actuators**

- Lens heating actuation
- ACC lens adjustment

• **Identification**

• **Clear errors**

• **Adjustments / settings**

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

• **Special functions**

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

• **Error memory**

• **Current values**

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

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

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

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

- Calculated vehicle acceleration

• **Actuators**

- Lens heating actuation
- ACC lens adjustment

• **Identification**

• **Clear errors**

• **Adjustments / settings**

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

• **Special functions**

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

• **Error memory**

• **Current values**

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

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

2011/11 -	CGWD	3.0	310	<p>Underbody/Steering Adaptive suspension system 4.0</p>	<ul style="list-style-type: none"> - Rear left damper valve current - Rear right damper valve current - Front left damper PWM signal value - Front right damper PWM signal value - Rear left damper PWM signal value - Rear right damper PWM signal value - Accumulator control possible - Last measured value, air suspension, front left - Last measured value, air suspension, front right - Last measured value, air suspension, rear left - Last measured value, air suspension, rear right - Current mileage - Front vehicle level set value - Rear vehicle level set value - Load level button: Raise - Load level button: Lower - Load level button: Redundant signal - Load level button LED - Air suspension: Requested level - Air suspension: Current level - Requested damper mode - Front left air spring valve - Front right air spring valve - Rear left air spring valve - Rear right air spring valve - Actuators power supply - Front left deviation from learned vehicle level - Front right deviation from learned vehicle level - Rear left deviation from learned vehicle level - Rear right deviation from learned vehicle level - Front left absolute vehicle height - Front right absolute vehicle height - Rear left absolute vehicle height - Rear right absolute vehicle height - Front left normal level height deviation - Front right normal level height deviation - Rear left normal level height deviation - Rear right normal level height deviation - Front left vehicle level sensor: Offset - Front right vehicle level sensor: Offset - Rear left vehicle level sensor: Offset - Rear right vehicle level sensor: Offset - Power supply vehicle level sensor, front left - Power supply vehicle level sensor, front right - Power supply vehicle level sensor, rear right - End basic setting - End running gear setting mode - Number of invalid keys - Readiness for operation - Steering wheel angle sensor: Angle - Air suspension compressor relay - Unlearning counter - Vehicle locking with key - System test result status - Time stamp: Month - Time stamp: Day - Time stamp: Hour - Time stamp: Minute - Time stamp: Second - Time stamp: Year - Operating time in hours - Vehicle inclination analysis - Vehicle axle twist analysis - Internal damper mode - Front left level correction value - Front right level correction value - Rear left level correction value - Rear right level correction value
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- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
 - Button lights
 - Central pressure accum., pressure discharge

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

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

2011/05
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CDNB

2.0

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

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

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

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

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

Cruise control
ACC 4.1

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

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

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2.0

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

Cruise control
ACC 4.1

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

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

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

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

Cruise control
ACC 4.1

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

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- **Error memory**

- **Current values**

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

Underbody/Steering
Adaptive suspension system 4.0

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

actuation operations

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

• **Actuators**

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

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

Cruise control
ACC 4.1

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

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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CLAB

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

Underbody/Steering
Adaptive suspension system 4.0

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

actuation operations

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

• **Actuators**

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

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

ACC 4.1

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

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

Cruise control
ACC 4.1

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

actuation operations

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

• **Actuators**

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

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

Cruise control
ACC 4.1

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

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

operations

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

• **Actuators**

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

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

Cruise control
ACC 4.1

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

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

Cruise control
ACC 4.1

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

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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

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Underbody/Steering
Adaptive suspension system 4.0

value

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

value

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

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

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

- **Adjustments / settings**

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

- **Special functions**

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

- **Error memory**

- **Current values**

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

2010/11
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CLAB

3.0

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

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

Tire control system
Tire pressure monitor 4.0

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

loaded

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

operations

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

• **Actuators**

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

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

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

Tire control system
Tire pressure monitor 4.0

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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

Tire control system
Tire pressure monitor 4.0

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

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

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Transfer configuration
 - ACC sensor adjustment
 - Basic adjustment
- **Error memory**
- **Current values**
 - Calculated vehicle speed
 - Power supply Clamp 15
 - Software version

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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

Tire control system
Tire pressure monitor 4.0

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

partially loaded

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

Tire control system
Tire pressure monitor 4.0

loaded

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

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<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - Adjustment of vehicle level sensors - Activate air suspension - Adaptation of normal level - Wheel alignment - Activate/deactivate shipment mode • Special functions <ul style="list-style-type: none"> - Pressure reduction - Pressure accumulator, preload pressure - Pressure build-up - Charge air suspension struts • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed 				

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

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

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Adaptive suspension system 4.0

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

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

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

operations

- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation

operations

- No.of front right additional volume valve

actuation operations

- No.of rear left additional volume valve actuation

operations

- No.of rear right additional volume valve actuation

operations

- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction

positive/negative

- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program

• **Actuators**

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

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

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

Tire control system
Tire pressure monitor 4.0

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

- **Error memory**

- **Current values**

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

Tire control system
Tire pressure monitor 4.0

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

Tire control system
Tire pressure monitor 4.0

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

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CLAB

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

Cruise control
ACC 4.1

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

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

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

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

Tire control system
Tire pressure monitor 4.0

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

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

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

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

Anti-block system
Electrohydr. brake (SBC3)

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

Cruise control
ACC 4.1

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

- Calculated vehicle acceleration

• **Actuators**

- Lens heating actuation
- ACC lens adjustment

• **Identification**

• **Clear errors**

• **Adjustments / settings**

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

• **Special functions**

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

• **Error memory**

• **Current values**

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

2012/02

CHJA

2.0

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Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

2012/05

CEUA

4.0

420

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

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

value

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CRDB

4.0

560

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

2012/11 -	CJXC	2.0	301	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply
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					<ul style="list-style-type: none"> - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side 2 - Ignition circuit 2, belt tensioner, front passenger side 2 • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
					• Identification

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

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CJXB

2.0

280

Airbag
Airbag AB 20 UDS

Ohm value

- Driver side rear belt tensioner ign.circuit: Ohm value

- Passenger side rear belt tensioner ign.circuit: Ohm value

- Battery isolator ignition circuit: Ohm value

- Driver side front seat position sensor: Current value

- Passenger side front seat position sensor:

Current value

- Driver side 2nd row belt switch: Ohm value

- Passenger side 2nd row belt switch: Ohm value

- 2nd row center belt switch: Ohm value

- Driver side 3rd row belt switch: Ohm value

- Passenger side 3rd row belt switch: Ohm value

- Driver side front buckle switch: Ohm value

- Passenger side front buckle switch: Ohm value

- Seat occupied sensor: Ohm value

- Driving profile selection system status

- Left belt tensioner fault status

- Right belt tensioner fault status

- Driver side rollover protection trigger

- Passenger side rollover protection trigger

- Passenger side rollover protection trigger: Ohm value

- Driver side rollover protection trigger: Ohm value

- Right belt tensioner: Terminal 15

- Right belt tensioner: Power supply

- Right belt tensioner: Current input

- Left belt tensioner: Current input

- Left belt tensioner: Terminal 15

- Left belt tensioner: Power supply

- Left belt tensioner: Temperature

- Right belt tensioner: Temperature

- Left belt tensioner: tensioning cycle

characteristic 1

- Left belt tensioner: tensioning cycle

characteristic 2

- Left belt tensioner: tensioning cycle

characteristic 3

- Left belt tensioner: tensioning cycle

characteristic 4

- Right belt tensioner: tensioning cycle

characteristic 1

- Right belt tensioner: tensioning cycle

characteristic 2

- Right belt tensioner: tensioning cycle

characteristic 3

- Right belt tensioner: tensioning cycle

characteristic 4

- Driving profile selection functional status

- Driving profile switching

- HV battery ignition circuit open circuit

- HV battery ignition circuit open circuit ohm value

- Passenger side airbag exhaust valve ignition circuit

- Passenger side airbag exhaust valve ign.circuit

ohm value

- Status: Key-operated switch contact 1

- Status: Key-operated switch contact 2

- Driver side rear belt tensioner ignition circuit

- Passenger side rear belt tensioner ignition circuit

- Driver side pedestrian protection trigger ignition

circuit

- Passenger side pedestrian protection trigger

ignition circuit

- Driver side front airbag ignition circuit 1: Ohm

					<p>value</p> <ul style="list-style-type: none"> - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: <p>Ohm value</p> <ul style="list-style-type: none"> - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side <p>2</p> <ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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AUDI					S6 [4G2, C7] - S6 4.0 TFSI quattro	
Year	Engine	Liters	HP	System	Functions	
				Cruise control ACC 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - ACC sensor adjustment - Basic adjustment • Error memory • Current values <ul style="list-style-type: none"> - Calculated vehicle speed - Power supply Clamp 15 - Software version - Vertical angle deviation - Horizontal angle deviation - Radar beam 1 intensity - Radar beam 2 intensity - Radar beam 3 intensity - Radar beam 4 intensity - Radar status - Misalignment angle - ACC lens heating actuation signal - Radar beam 1 and 2 medium intensity - Misalignment angle 2 - Control unit temperature - System identification - Calculated vehicle acceleration • Actuators <ul style="list-style-type: none"> - Lens heating actuation - ACC lens adjustment 	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - Adjustment of vehicle level sensors - Activate air suspension 	

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

2012/04
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CEUC

4.0

420

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

2012/04

CEUC

4.0

420

Underbody/Steering
Adaptive suspension system 4.0

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

operations

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

• **Actuators**

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

					Hard - Rear left damper adjustment valve current, Soft - Rear left damper adjustment valve current, Hard - Rear right damper adjustment valve current, Soft - Rear right damper adjustment valve current, Hard
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AUDI S8 [4H, D4] - S8 4.0 FSI quattro					
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Year	Engine	Liters	HP	System	Functions
				Anti-block system Electrohydr. brake (SBC3)	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Pulse-wheel test - Actuator test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Reset brake temperature monitoring - Brake temperature monitoring information - Sensor unit zero position compensation - Reset puncture indicator • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Engine revolution - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - valve relay status - pressure sensor - Driving wheels angle - Actual values selection - rotation angle sensor 2 - Residual acceleration sensor 2 - Power supply Clamp 30 - ABS hydraulic/return pump - ESP brake application CAN signal - Front left speed sensor installation position - Front right speed sensor installation position - Rear left speed sensor installation position - Rear right speed sensor installation position - Front left speed sensor direction of rotation - Front right speed sensor direction of rotation - Rear left speed sensor direction of rotation - Rear right speed sensor direction of rotation - Lateral acceleration sensor 1 - ESP button status - Brake booster pressure actual value - Engine control unit brake application CAN signal - Status Handbrake - HFM Ratio - Yaw rate sensor 1
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - ACC sensor adjustment - Basic adjustment • Error memory • Current values <ul style="list-style-type: none"> - Calculated vehicle speed - Power supply Clamp 15

Cruise control
ACC 4.1

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

• **Actuators**

- Lens heating actuation
- ACC lens adjustment

• **Identification**

• **Clear errors**

• **Adjustments / settings**

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

• **Special functions**

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

• **Error memory**

• **Current values**

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

2012/04

CGTA

4.0

520

Underbody/Steering
Adaptive suspension system 4.0

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

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

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

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

[3 \[E 46\] Touring - 330 xi Touring](#)
[3 \[E 46\] Touring - 325 xi Touring](#)
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[5 \[E 39\] - 520 d](#)
[5 \[E 39\] - 525 d](#)
[5 \[E 39\] - 525 i](#)
[5 \[E 39\] - 530 i](#)
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[5 \[E 39\] Touring - 525 d Touring](#)
[5 \[E 39\] Touring - 530 i Touring](#)
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[X 3 \[E 83\] - X 3 3.0 d](#)
[X 3 \[E 83\] - X 3 2.0 d](#)
[X 3 \[E 83\] - X 3 2.0 i](#)
[X 3 \[E 83\] - X 3 2.5 si](#)
[X 3 \[E 83\] - X 3 3.0 si](#)
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[X 5 \[E 53\] - X 5 4.8 is](#)
[Z 4 \[E 85\] - Z 4 2.5 i](#)
[Z 4 \[E 85\] - Z 4 3.0 i](#)
[Z 4 \[E 85\] - Z 4 2.2 i](#)
[Z 4 \[E 85\] - Z 4 2.0 i](#)
[Z 4 \[E 85\] - Z 4 2.5 si](#)
[Z 4 \[E 85\] - Z 4 3.0 si](#)
[Z 4 \[E 85\] - Z 4 M 3.2](#)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2004/03

Central electronics 1.0

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

• **Actuators**

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

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

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

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

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

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

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

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

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

3 [E 46] Compact - 318 td Compact

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

20 4D 4

2.0

116

Central electronics
Central electronics 1.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

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

• **Actuators**

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

- Turn off the electrical loads

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2000/09
-
2006/05

25 6S 5

2.5

192

Central electronics
Central electronics 1.0

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1999/10
-
2003/03

30 6D 1

3.0

184

Central electronics
Central electronics 1.0

• **Error memory**

• **Current values**

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

• **Actuators**

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

2003/03
-
2005/09

30 6D 2

3.0

204

Central electronics
Central electronics 1.0

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

- Turn off the electrical loads

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1998/10
-
2003/07

50 8S 1

5.0

400

Central electronics
Central electronics 1.0

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

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

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

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

					<ul style="list-style-type: none"> - Wipe cleaners el.motor, stage 2 - Horn relay - front left el. window lifter open - front left el. window lifter closed - front rear el. window lifter open - front rear el. window lifter closed - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Doors locking - Doors unlocking - Trunk unlocking - Interior lighting - Alarm system LED - Turn off the electrical loads
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BMW **5 [E 39] - 525 d**

Year	Engine	Liters	HP	System	Functions
2000/04 - 2003/07	25 6D 1	2.5	163	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Switch - Anti-theft unit - Terminal 30 - Collision signal - Loads switch off - Child safety system switch - Rear top opening switch - Rear top unlocking switch - Left front door - Right front door - Central locking switch, interior - Terminal 15R - Tank filler door, unlocking switch - Left-rear door - Right rear door - Trunk top - Motor top - Movable rear window - Windshield washing switch - Wipe cleaners switch - Windshield washing pump, terminal 30 - El.windows, terminal 30 - Central locking, terminal 30 - Rear top locking, terminal 30 - Interior lighting, terminal 30 - Wiper cleaners interval switch - Lights cleaning - El.window switch front left - El.window switch front right - El.window switch rear left - El.window switch rear right - Pinching protection, front left - Pinching protection, front right - Pinching protection, rear left - Pinching protection, rear right - El.windows central lock - Door locking cylinder, left - Door locking cylinder, right - Rear window switch with handle - Rear door locking - Interior lighting

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

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

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

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

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

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

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

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

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

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

					<ul style="list-style-type: none"> - front left el. window lifter open - front left el. window lifter closed - front rear el. window lifter open - front rear el. window lifter closed - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Doors locking - Doors unlocking - Trunk unlocking - Interior lighting - Alarm system LED - Turn off the electrical loads
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BMW **5 [E 39] Touring - 520 d Touring**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2001/03
-
2003/09

30 6D 1

3.0

184

Central electronics
Central electronics 1.0

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

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

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

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

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

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

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

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

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

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

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

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

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

Z 4 [E 85] - Z 4 M 3.2

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

32 6S 4

3.2

343

Central electronics
Central electronics 1.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

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

• **Actuators**

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

- Turn off the electrical loads

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

					<ul style="list-style-type: none"> - rear right el. window lifter open - rear right el. window lifter closed - Doors locking - Doors unlocking - Trunk unlocking - Interior lighting - Alarm system LED - Turn off the electrical loads
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BMW	Z 4 [E 86] Coupe - Z 4 3.0 si Coupe
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Year	Engine	Liters	HP	System	Functions
2006/03 - 2008/08	N52 B30...	3.0	265	Central electronics Central electronics 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Switch - Anti-theft unit - Terminal 30 - Collision signal - Loads switch off - Child safety system switch - Rear top opening switch - Rear top unlocking switch - Left front door - Right front door - Central locking switch, interior - Terminal 15R - Tank filler door, unlocking switch - Left-rear door - Right rear door - Trunk top - Motor top - Movable rear window - Windshield washing switch - Wipe cleaners switch - Windshield washing pump, terminal 30 - El.windows, terminal 30 - Central locking, terminal 30 - Rear top locking, terminal 30 - Interior lighting, terminal 30 - Wiper cleaners interval switch - Lights cleaning - El.window switch front left - El.window switch front right - El.window switch rear left - El.window switch rear right - Pinching protection, front left - Pinching protection, front right - Pinching protection, rear left - Pinching protection, rear right - El.windows central lock - Door locking cylinder, left - Door locking cylinder, right - Rear window switch with handle - Rear door locking - Interior lighting - Interior lighting, switch - Rear left el.windowlifter switch - Rear right el.windowlifter switch • Actuators <ul style="list-style-type: none"> - windscreen washing pump - Rear window washing pump - Wipe cleaners el.motor, stage 1 - Wipe cleaners el.motor, stage 2

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

[Impala - Impala 5.4](#)

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

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|--|--|--|--|--|---|
| | | | | | <ul style="list-style-type: none">- Cooling agent temperature voltage- Intake air temperature voltage- Stop light switch 1- Stop light switch 2- Button speed control- Driving speed range control- Radiator fan speed 3:- Vehicle acceleration- Security holding time- Cylinder 1 knock sensor ZW correction- Cylinder 2 knock sensor ZW correction- Cylinder 3 knock sensor ZW correction- Cylinder 4 knock sensor ZW correction- E-Gas fail safe• Adjustment<ul style="list-style-type: none">- Throttle valve adaption- Idle running speed programing- Lambda control adaptation |
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[Berlingo \[M59\] - Berlingo 1.1i](#)
[Berlingo \[M59\] - Berlingo 1.4i](#)
[Berlingo \[M59\] - Berlingo 1.6i 16V](#)
[Berlingo \[M59\] - Berlingo 1.9 Diesel](#)
[Berlingo \[M59\] - Berlingo 2.0 HDi](#)
[Berlingo \[M59\] - Berlingo 1.6 HDi](#)
[C-Crosser \[I4\] - C-Crosser 2.2 HDi 4x4](#)
[C5 \[X4\] - C5 2.2 HDi](#)
[C5 \[X4\] - C5 2.0 HDi](#)
[C5 \[X4\] Break - C5 2.0 HDi Break](#)
[C5 \[X4\] Break - C5 2.2 HDi Break](#)
[C5 \[X7\] - C5 3.0 HDi 24V](#)
[C5 \[X7\] Tourer - C5 3.0 HDi 24V Tourer](#)
[C6 \[X6\] - C6 3.0 HDi 24V](#)
[C8 \[V3\] - C8 2.0 HDi](#)
[C8 \[V3\] - C8 2.2 HDi](#)
[Evasion \[U60\] - Evasion 1.9 Diesel Turbo](#)
[Evasion \[U60\] - Evasion 2.1 Diesel Turbo](#)
[Evasion \[U60\] - Evasion 2.0 HDi](#)
[Jumper - Jumper 2.8 HDI](#)
[Jumper - Jumper 2.3 HDI](#)
[Jumper \[U9\] - Jumper 2.2 HDi](#)
[Jumper \[U9\] - Jumper 3.0 HDi](#)
[Jumpy \[G9\] - Jumpy 2.0 HDi](#)
[Jumpy \[G9\] - Jumpy 1.6 HDi](#)
[Jumpy \[U64\] - Jumpy 1.9 Diesel Turbo](#)
[Jumpy \[U64\] - Jumpy 1.9 Diesel](#)
[Jumpy \[U64\] - Jumpy 1.6i](#)
[Jumpy \[U64\] - Jumpy 2.0 HDi](#)
[Jumpy \[U64\] - Jumpy 2.0i](#)
[Nemo \[A9\] - Nemo 1.4 HDi](#)
[Nemo \[A9\] - Nemo 1.4](#)
[Nemo \[A9\] - Nemo 1.3 HDi](#)
[Xantia \[X2\] - Xantia 2.0 HDi](#)
[Xantia \[X2\] - Xantia 3.0i](#)
[Xantia \[X2\] - Xantia 1.8i](#)
[Xantia \[X2\] - Xantia 1.8i 16V](#)
[Xantia \[X2\] - Xantia 2.0i Turbo](#)
[Xantia \[X2\] - Xantia 2.0i](#)
[Xantia \[X2\] - Xantia 2.0i 16V](#)
[Xantia \[X2\] - Xantia 1.9 Diesel Turbo](#)
[Xantia \[X2\] - Xantia 2.1 Diesel Turbo](#)
[Xantia \[X2\] - Xantia 1.6i](#)
[Xantia \[X2\] Break - Xantia 3.0i Break](#)
[Xantia \[X2\] Break - Xantia 2.0 HDi Break](#)
[Xantia \[X2\] Break - Xantia 1.8i Break](#)

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

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

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

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

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

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

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

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

2007/09

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2.2

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Engine control
Diesel EDC 16CP39 MIT

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

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

2010/06

4HK

2.2

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Engine control
Diesel EDC 16CP39 MIT

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1996/04 - 2002/07	P8C	2.1	109 - 110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
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CITROEN **Evasion [U60] - Evasion 2.0 HDi**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- Fuel metering valve

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

CITROEN Xsara [N6] Break - Xsara 1.9 Diesel Break

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

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

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

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

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

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

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

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

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

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

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

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

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

CITROEN Xsara [N6] Coupe - Xsara 1.9 Diesel Coupe

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

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

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

2000/08

Auxiliary/supplementary heater 1.0

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Tire control system
Tire pressure monitor 1.2

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- Trailer operation
- System

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- Front Park Distance Control

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

2006/06 -	F1CE0441A	3.0	136	Engine control IAW 5SF4 Natural Power	<ul style="list-style-type: none"> - Engine control unit - Engine revolution - Ignition angle - lambda integrator - Air conditioner compressor relay - throttle valve angle - system power supply - fan for radiator blowing - Exceeding the max revolution - Main relay - Max speed limitation - Acceleration pedal position sensor - Injection period - Accumulation time, ignition coil cylinder 1 - Accumulation time, ignition coil cylinder 2 - Accumulation time, ignition coil cylinder 3 - Accumulation time, ignition coil cylinder 4 - Brake pedal switch - Oxygen sensor bank 1, sensor 1) - Oxygen sensor (bank 1, sensor 2) - Transmission - Clutch pedal switch - intake manifold pressure sensor - Start permission - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Oil pressure switch - Engine status - Air conditioner compressor request - Cooling agent pressure - Turbocharger control valve - Number of electronic control unit programming - Atmospheric pressure sensor - Overspeed frequency - Overspeed duration - Oxygen sensor status (B1, S1) - Oxygen sensor status (B1, S2) - Voltage DK position sensor 1 - Voltage DK position sensor 2 - Evaporative emission control volume - Ingested air temperature sensor 1 - Km reading at the last programming - Gas tank pressure - Gas rail temperature - Gas rail pressure - Gas tank, pressure sensor, voltage - Var.turb.geom. turbocharger, specified position - Mileage on last overspeed - VTG turbocharger actual position
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FIAT Ducato '06 [250] - Ducato 20 150 Multijet					
Year	Engine	Liters	HP	System	Functions
2010/09 -	F1CE3481N	3.0	146	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Ducato '06 [250] - Ducato 20 160 Multijet					
Year	Engine	Liters	HP	System	Functions
2010/09 -	F1CE3481M	3.0	156	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Ducato '06 [250] - Ducato 17 150 Multijet					
Year	Engine	Liters	HP	System	Functions
2010/04 -	F1CE3481N	3.0	146	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Ducato '06 [250] - Ducato 20 140 Natural Power					
Year	Engine	Liters	HP	System	Functions
				Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Read configuration - Reset throttle valve adaptation values - Reset A/C /cruise control parameters - Reset after speed trigger wheel replacement • Error memory • Current values

2009/09 -	F1CE0441A	3.0	136	Engine control IAW 5SF4 Natural Power	<ul style="list-style-type: none"> - Vehicle driving speed - Mileage - throttle valve position - Coolant temperature - Engine control unit - Engine revolution - Ignition angle - lambda integrator - Air conditioner compressor relay - throttle valve angle - system power supply - fan for radiator blowing - Exceeding the max revolution - Main relay - Max speed limitation - Acceleration pedal position sensor - Injection period - Accumulation time, ignition coil cylinder 1 - Accumulation time, ignition coil cylinder 2 - Accumulation time, ignition coil cylinder 3 - Accumulation time, ignition coil cylinder 4 - Brake pedal switch - Oxygen sensor bank 1, sensor 1) - Oxygen sensor (bank 1, sensor 2) - Transmission - Clutch pedal switch - intake manifold pressure sensor - Start permission - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Oil pressure switch - Engine status - Air conditioner compressor request - Cooling agent pressure - Turbocharger control valve - Number of electronic control unit programming - Atmospheric pressure sensor - Overspeed frequency - Overspeed duration - Oxygen sensor status (B1, S1) - Oxygen sensor status (B1, S2) - Voltage DK position sensor 1 - Voltage DK position sensor 2 - Evaporative emission control volume - Ingested air temperature sensor 1 - Km reading at the last programming - Gas tank pressure - Gas rail temperature - Gas rail pressure - Gas tank, pressure sensor, voltage - Var.turb.geom. turbocharger, specified position - Mileage on last overspeed - VTG turbocharger actual position
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FIAT Ducato '08 [244] - Ducato 11 2.3 JTD					
Year	Engine	Liters	HP	System	Functions
2008/01 -	F1AE0481C	2.3	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed

					<ul style="list-style-type: none"> - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
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FIAT Ducato '08 [244] - Ducato 15 2.3 JTD					
Year	Engine	Liters	HP	System	Functions
2008/01 -	F1AE0481C	2.3	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Ducato '08 [244] - Ducato 15 2.3 JTD EGR					
Year	Engine	Liters	HP	System	Functions
2008/01 -	F1AE0481C	2.3	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Ducato '08 [244] - Ducato 18 2.3 JTD					
Year	Engine	Liters	HP	System	Functions
2008/01 -	F1AE0481C	2.3	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Ducato '08 [244] - Ducato 18 2.3 JTD EGR					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification

2008/01 -	F1AE0481C	2.3	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
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FIAT	Ducato '11 [250] - Ducato 115 Multijet
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Year	Engine	Liters	HP	System	Functions
				Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Air consumption meter - Vehicle driving speed - Mileage - Fuel pump relay - Engine control unit - fuel temperature sensor - Engine revolution - Cruise control - Exhausted gases recirculation - Lights switch 2 - Immobilizer - system power supply - Exceeding the max revolution - Preheating control - Coolant temperature sensor - Air conditioner relay - Rail pressure sensor - Rail pressure, nominal - Air mass, nominal value - Turbo pressure, nominal value - Acceleration pedal position sensor - Brake pedal switch - Acceleration pedal position sensor 1 - Acceleration pedal position sensor 2 - Clutch pedal switch - Charging-air pressure sensor - Start permission - Lambda probes heater voltage - Air conditioner compressor request - Gear box transmission identification - Cooling agent pressure - Glow plugs control - EGR cooling bypass solenoid valve

2011/06 -	250 A1.000	2.0	115	<p>Engine control Diesel EDC 17C49 V1</p> <ul style="list-style-type: none"> - Mileage since temperature indicator lamp on - Mileage since fuel water content lamp on - Mileage with DPF indicator lamp ON - Intake air temperature sensor 2, voltage - Diesel particulate filter - Voltage fuel temperature sensor - Voltage rail pressure sensor - Charging-air pressure sensor voltage - Number of electronic control unit programming - Atmospheric pressure sensor - Exhaust gas recirculation Position Actual Value - Exhaust gas recirculation Position Target Value - Evaporative emission control ventilation system - Engine coolant temperature sensor: signal voltage - Mileage since oil quality lamp activation - Overspeed frequency - Overspeed duration - Injected quantity (total) - Particle filter differential pressure - Throttle valve position - Oxygen concentration - Ingested air temperature sensor 1 - Fuel quantity control valve - Water in fuel - Average time last 5 regenerations - Average range of the last 5 regenerations - Average range of the last 5 regenerations - Particle filter temperature - Distance since EDC-SG-Change - Km reading at the last programming - Ambient temperature sensor - km from the last DPF regeneration - Particle filter, saturation - Turbo charger bypass valve - Kilometer reading from the last DPF replacement - Partial regeneration operations count - Mileage on lubrication service warning - Mileage on last overspeed • Actuators <ul style="list-style-type: none"> - Preheat control light - Oil pressure control light - Throttle valve actuator - Cooling agent temperature warning light - Speed control light - Fuel water content light - Cooling agent compressor - Radiator fan relay 1 - Radiator fan relay 2 - Cranckcase heater element - Particle filter control light - Fuel metering block - Turbocharger wastegate control - Electric fuel pump relay
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FIAT Ducato '11 [250] - Ducato 130 Multijet					
Year	Engine	Liters	HP	System	Functions
				<p>Parking assisting system Park Distance Control 4.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply

					<ul style="list-style-type: none"> - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming
2011/06	F1AE3481D	2.3	130	<p>Engine control Diesel EDC 8F3 CF5 V2 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset lubrication service • Error memory • Current values <ul style="list-style-type: none"> - Air consumption meter - Oil quality - Vehicle driving speed - Mileage - Coolant temperature sensor voltage - throttle valve position - Fuel pump relay - Engine control unit - fuel temperature sensor - Engine revolution - oxygen sensor voltage - cruise control switch - Cruise control - Exhausted gases recirculation - Lights switch 2 - system power supply - Exceeding the max revolution - Coolant temperature sensor - Air conditioner relay - Rail pressure sensor - Rail pressure, nominal - Air mass, nominal value - Turbo pressure, nominal value - Acceleration pedal position sensor - Brake pedal switch - Acceleration pedal position sensor 1 - Acceleration pedal position sensor 2 - Clutch pedal switch - Charging-air pressure sensor - Start permission - Throttle valve required position - Air conditioner compressor request - Gear box transmission identification - Distance since last oil change - Cooling agent pressure - Turbocharger control valve - Mileage since temperature indicator lamp on - Mileage with DPF indicator lamp ON - Clutch pedal stop - No. of regenerations since lubrication service - Intake air temperature sensor 2, voltage - Start/stop release by Central electronics - Start/stop function - Start/stop function status - Start/stop activation prohibition - Brake booster switch - Voltage fuel temperature sensor - Voltage rail pressure sensor - Charging-air pressure sensor voltage - Number of electronic control unit programming - Atmospheric pressure sensor - Crankcase breather preheating - Mileage since oil quality lamp activation - Neutral position - Overspeed frequency - Overspeed duration

					<ul style="list-style-type: none"> - Injected quantity (total) - Status particle filter - Particle filter differential pressure - Oxygen concentration - Ingested air temperature sensor 1 - Intake-air temperature sensor 2 - Fuel quantity control valve - Water in fuel - Average time last 5 regenerations - Average range of the last 5 regenerations - Average range of the last 5 regenerations - Particle filter temperature - Distance since EDC-SG-Change - Km reading at the last programming - km from the last DPF regeneration - Particle filter, saturation - Kilometer reading from the last DPF replacement - Var.turb.geom. turbocharger, specified position - Partial regeneration operations count - Mileage on lubrication service warning - Mileage on last overspeed - Number of regeneration requests - VTG turbocharger actual position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Warming up control lamp - Air conditioner relay - Radiator fan stage 1 - Radiator fan stage 2 - Glow relay 1 - Engine management system error lights - Oil pressure control light - Cooling agent temperature warning light - Speed control light - Fuel water content light - Cranckcase heater element - Particle filter control light - Turbocharger control motor - Fuel metering block
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FIAT					Ducato '11 [250] - Ducato 150 Multijet	
Year	Engine	Liters	HP	System	Functions	
				Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming 	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset lubrication service • Error memory • Current values <ul style="list-style-type: none"> - Air consumption meter - Oil quality 	

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Engine control
Diesel EDC 8F3 CF5 V2 CAN

- Vehicle driving speed
- Mileage
- Coolant temperature sensor voltage
- throttle valve position
- Fuel pump relay
- Engine control unit
- fuel temperature sensor
- Engine revolution
- oxygen sensor voltage
- cruise control switch
- Cruise control
- Exhausted gases recirculation
- Lights switch 2
- system power supply
- Exceeding the max revolution
- Coolant temperature sensor
- Air conditioner relay
- Rail pressure sensor
- Rail pressure, nominal
- Air mass, nominal value
- Turbo pressure, nominal value
- Acceleration pedal position sensor
- Brake pedal switch
- Acceleration pedal position sensor 1
- Acceleration pedal position sensor 2
- Clutch pedal switch
- Charging-air pressure sensor
- Start permission
- Throttle valve required position
- Air conditioner compressor request
- Gear box transmission identification
- Distance since last oil change
- Cooling agent pressure
- Turbocharger control valve
- Mileage since temperature indicator lamp on
- Mileage with DPF indicator lamp ON
- Clutch pedal stop
- No. of regenerations since lubrication service
- Intake air temperature sensor 2, voltage
- Start/stop release by Central electronics
- Start/stop function
- Start/stop function status
- Start/stop activation prohibition
- Brake booster switch
- Voltage fuel temperature sensor
- Voltage rail pressure sensor
- Charging-air pressure sensor voltage
- Number of electronic control unit programming
- Atmospheric pressure sensor
- Crankcase breather preheating
- Mileage since oil quality lamp activation
- Neutral position
- Overspeed frequency
- Overspeed duration
- Injected quantity (total)
- Status particle filter
- Particle filter differential pressure
- Oxygen concentration
- Ingested air temperature sensor 1
- Intake-air temperature sensor 2
- Fuel quantity control valve
- Water in fuel
- Average time last 5 regenerations
- Average range of the last 5 regenerations
- Average range of the last 5 regenerations
- Particle filter temperature
- Distance since EDC-SG-Change
- Km reading at the last programming

					<ul style="list-style-type: none"> - km from the last DPF regeneration - Particle filter, saturation - Kilometer reading from the last DPF replacement - Var.turb.geom. turbocharger, specified position - Partial regeneration operations count - Mileage on lubrication service warning - Mileage on last overspeed - Number of regeneration requests - VTG turbocharger actual position <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Warming up control lamp - Air conditioner relay - Radiator fan stage 1 - Radiator fan stage 2 - Glow relay 1 - Engine management system error lights - Oil pressure control light - Cooling agent temperature warning light - Speed control light - Fuel water content light - Cranckcase heater element - Particle filter control light - Turbocharger control motor - Fuel metering block
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FIAT Ducato '11 [250] - Ducato 180 Multijet					
Year	Engine	Liters	HP	System	Functions
2011/06 -	F1CE348IE	3.0	177	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

FIAT Ducato '11 [250] - Ducato 110 Multijet					
Year	Engine	Liters	HP	System	Functions
				Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset lubrication service • Error memory

2011/10
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F1AE3481G

2.3

113

Engine control
Diesel EDC 8F3 CF5 V2 CAN

• **Current values**

- Air consumption meter
- Oil quality
- Vehicle driving speed
- Mileage
- Coolant temperature sensor voltage
- throttle valve position
- Fuel pump relay
- Engine control unit
- fuel temperature sensor
- Engine revolution
- oxygen sensor voltage
- cruise control switch
- Cruise control
- Exhausted gases recirculation
- Lights switch 2
- system power supply
- Exceeding the max revolution
- Coolant temperature sensor
- Air conditioner relay
- Rail pressure sensor
- Rail pressure, nominal
- Air mass, nominal value
- Turbo pressure, nominal value
- Acceleration pedal position sensor
- Brake pedal switch
- Acceleration pedal position sensor 1
- Acceleration pedal position sensor 2
- Clutch pedal switch
- Charging-air pressure sensor
- Start permission
- Throttle valve required position
- Air conditioner compressor request
- Gear box transmission identification
- Distance since last oil change
- Cooling agent pressure
- Turbocharger control valve
- Mileage since temperature indicator lamp on
- Mileage with DPF indicator lamp ON
- Clutch pedal stop
- No. of regenerations since lubrication service
- Intake air temperature sensor 2, voltage
- Start/stop release by Central electronics
- Start/stop function
- Start/stop function status
- Start/stop activation prohibition
- Brake booster switch
- Voltage fuel temperature sensor
- Voltage rail pressure sensor
- Charging-air pressure sensor voltage
- Number of electronic control unit programming
- Atmospheric pressure sensor
- Crankcase breather preheating
- Mileage since oil quality lamp activation
- Neutral position
- Overspeed frequency
- Overspeed duration
- Injected quantity (total)
- Status particle filter
- Particle filter differential pressure
- Oxygen concentration
- Ingested air temperature sensor 1
- Intake-air temperature sensor 2
- Fuel quantity control valve
- Water in fuel
- Average time last 5 regenerations
- Average range of the last 5 regenerations
- Average range of the last 5 regenerations

					<ul style="list-style-type: none"> - Particle filter temperature - Distance since EDC-SG-Change - Km reading at the last programming - km from the last DPF regeneration - Particle filter, saturation - Kilometer reading from the last DPF replacement - Var.turb.geom. turbocharger, specified position - Partial regeneration operations count - Mileage on lubrication service warning - Mileage on last overspeed - Number of regeneration requests - VTG turbocharger actual position <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Warming up control lamp - Air conditioner relay - Radiator fan stage 1 - Radiator fan stage 2 - Glow relay 1 - Engine management system error lights - Oil pressure control light - Cooling agent temperature warning light - Speed control light - Fuel water content light - Cranckcase heater element - Particle filter control light - Turbocharger control motor - Fuel metering block
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FIAT Fiorino '07 [225] - Fiorino 1.3 Multijet					
Year	Engine	Liters	HP	System	Functions
2007/12 -	199 A2.000	1.3	75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming
2010/09 -	199 B1.000	1.3	95	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming
2010/06 -	199 A9.000	1.3	75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values

					<ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming
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FIAT Fiorino '07 [225] - Fiorino 1.4					
Year	Engine	Liters	HP	System	Functions
2007/12 -	KFV	1.4	73	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming
2010/06 -	KFT	1.4	73	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

FIAT Fiorino '07 [225] - Fiorino 1.4 Natural Power					
Year	Engine	Liters	HP	System	Functions
2009/10 -	350 A1.000	1.4	69 - 78	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

FIAT Grande Punto [199] - Grande Punto 1.4 LPG					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Coolant temperature

2008/09 - 2011/12	350 A1.000	1.4	76	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> - Engine revolution - emergency switch off - electric fuel pump - Engine status - Control unit, internal relay - Injection time, cylinder 1 - Injection time, cylinder 2 - Injection time, cylinder 3 - Injection time, cylinder 4 - Fuel feeding stop - LPG operation - Petrol operation - Liquefied petroleum gas level warning lamp - Liquefied petroleum gas switch - Gas tank level - Operating time - Gas switching waiting time - Gas shut-off valve current input - Control unit temperature - Dry-running operation function - Fuel mode requested - Fuel mode - Current at the fuel pump - Gas rail temperature - Gas rail pressure - Gas shut-off valve - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 • Actuators <ul style="list-style-type: none"> - emergency switch off - electrical fuel pump relay - Liquefied petroleum gas indicator lamp - Injection valve Cylinder 1 - Injection valve Cylinder 2 - Injection valve Cylinder 3 - Injection valve Cylinder 4 - Gas shut-off valve - Operating mode indicator lamp
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FIAT						Idea - Idea 1.8	
Year	Engine	Liters	HP	System	Functions		
2006/01 - 2010/07		1.8	110	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left 		

					<ul style="list-style-type: none"> - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
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FIAT						Idea - Idea 1.4	
Year	Engine	Liters	HP	System	Functions		
2007/01 - 2010/07	178F3011	1.4	80	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value 		
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory 		

2010/08 -		1.4	82	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Current values - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
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FIAT						Idea - Idea 1.6					
Year	Engine	Liters	HP	System		Functions					
2010/08 -	310A5011	1.6	115	Parking assisting system Park Distance Control 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System 					

FIAT						Idea Adventure - Idea Adventure 1.8					
Year	Engine	Liters	HP	System		Functions					
2006/01 - 2010/07		1.8	110	Tire control system Tire pressure monitor 1.1		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Program sensor code (activator) • Error memory • Current values - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value 					

					- Rear axle tire pressure set value
2008/01 - 2010/07		1.8	110	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value

FIAT Idea Adventure - Idea Adventure 1.6					
Year	Engine	Liters	HP	System	Functions
2010/08 -	310A5011	1.6	115	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Idea Adventure Locker - Idea Adventure Locker 1.8 Flex					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator)

2008/07 - 2010/07	X8	1.8	112 - 114	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
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FIAT Idea Adventure [Fase I] - Idea Adventure 1.8 Flex					
Year	Engine	Liters	HP	System	Functions
2006/08 - 2010/07	93313090- 7U	1.8	112 - 114	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code

					<ul style="list-style-type: none"> - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
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FIAT	Idea [350] - Idea 1.3 JTD 16V
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Year	Engine	Liters	HP	System	Functions
2004/01	188 A9.000	1.3	69	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature

					<ul style="list-style-type: none"> - Reverse gear - Trailer operation - System
				<p>Tire control system Tire pressure monitor 1.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
				<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Throttle valve test - Quantities comparison - Glow plug test - Exhaust gas recirculation system test • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset Lambda sensor adaptation values - HFM adaption reset - Rail pressure sensor adjustment

2004/11
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199 A3.000

1.3

90

Engine control
Diesel EDC 8DF CF5

- Differential pressure sensor adjustment
- Neutral position initialization
- Reset after replacement of additive filter
- Turbocharger basic setting
- Reset mileage with coolant temp. warnng light ON
- Reset mileage with fuel water cont. lamp ON
- Reset A/C /cruise control parameters
- Reset after speed trigger wheel replacement
- Reset after wastegate valve replacement
- **Special functions**
 - Fuel tank emptying
 - Diesel particulate filter regeneration run
- **Error memory**
- **Current values**
 - Power supply
 - Oil quality
 - Vehicle driving speed
 - Accelerator pedal position
 - Mileage
 - throttle valve position
 - Fuel temperature
 - Coolant temperature
 - Engine control unit
 - Engine revolution
 - atmospheric pressure
 - Exhausted gases recirculation
 - Lights switch 2
 - Exceeding the max revolution
 - Rail pressure, nominal
 - Rail pressure, actual
 - Air mass, nominal value
 - Air mass, actual value
 - Turbo pressure, nominal value
 - Turbo pressure, actual value
 - Starter activation
 - Acceleration pedal position sensor 1
 - Acceleration pedal position sensor 2
 - Fuel quantity metering device pulse-duty factor
 - Start permission
 - Throttle valve required position
 - Air conditioner status
 - Gear box transmission identification
 - Last oil change
 - Cooling agent pressure
 - Cooling agent compressor
 - Brake pedal
 - Throttle actuator
 - Final intake temperature
 - EGR cooling bypass solenoid valve
 - Mileage since temperature indicator lamp on
 - Mileage since fuel water content lamp on
 - Mileage with DPF indicator lamp ON
 - Clutch pedal stop
 - Start/stop release by Central electronics
 - Start/stop function
 - Start/stop function status
 - Start/stop activation prohibition
 - Brake booster switch
 - Duty cycle load pressure control
 - Number of electronic control unit programming
 - Fuel pump relay
 - Clutch pedal
 - Electronic control unit replacement required
 - Wastegate valve opening counter
 - Wastegate valve opening time
 - Speed control signal
 - Neutral position
 - Overspeed frequency

					<ul style="list-style-type: none"> - Overspeed duration - Injected quantity (total) - Status particle filter - Glow plug actuation - Operating switch speed - Particle filter differential pressure - Oxygen concentration - Average time last 5 regenerations - Average range of the last 5 regenerations - Average range of the last 5 regenerations - Particle filter temperature - Km reading at the last programming - km from the last DPF regeneration - Particle filter, saturation - Intake air initial temperature - Kilometer reading from the last DPF replacement - Var.turb.geom. turbocharger, specified position - Partial regeneration operations count - Mileage on lubrication service warning - Mileage on last overspeed - Number of regeneration requests - VTG turbocharger actual position <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - valve, exhausted gases recirculation - Radiator fan. stage 1 - Radiator fan. stage 2 - Suction control valve - Engine management system error lights - Oil pressure control light - Charging-air pressure magnetic valve - Cooling agent temperature warning light - Speed control light - Fuel water content light - Glow control light - Cooling agent compressor - Particle filter control light
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FIAT					Idea [350] - Idea 1.4 16V	
Year	Engine	Liters	HP	System	Functions	
2004/01				Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code 	

- 2012/12	843 A1.000	1.4	95		<ul style="list-style-type: none"> - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT					
Idea [350] - Idea 1.2 16V					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2012/12	188 A5.000	1.2	80	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2

					<ul style="list-style-type: none"> - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
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FIAT	Idea [350] - Idea 1.9 JTD 8V
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Year	Engine	Liters	HP	System	Functions
				Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset Lambda sensor adaptation values - HFM adaption reset

2004/01
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188 B2.000

1.9

100

Engine control
Diesel CR/EDC 16C9

- Rail pressure sensor adjustment
- **Error memory**
- **Current values**
 - Fuel filter warming
 - Vehicle driving speed
 - Engine oil pressure
 - Coolant temperature sensor voltage
 - throttle valve position
 - Fuel pump relay
 - Engine control unit
 - fuel temperature sensor
 - Engine revolution
 - cruise control switch
 - Lights switch 2
 - valve, exhausted gases recirculation
 - Immobilizer
 - system power supply
 - Exceeding the max revolution
 - turbo charger regulating valve
 - air conditioner compressor relay
 - Coolant temperature sensor
 - Rail pressure, nominal
 - Rail pressure, actual
 - Air mass, nominal value
 - Air mass, actual value
 - Turbo pressure, nominal value
 - Turbo pressure, actual value
 - Acceleration pedal position sensor
 - Brake pedal switch
 - Clutch pedal switch
 - Start permission
 - Gas pedal position sensor 1 Voltage
 - Gas pedal position sensor 2 Voltage
 - Odometer
 - Air conditioner status
 - Tempomat speed (required value)
 - Cooling agent pressure
 - Glow plugs control
 - Cruise control/ACC button, speed +
 - Cruise control/ACC button, speed -
 - Atmospheric pressure voltage sensor
 - Charging-air pressure sensor voltage
 - Number of electronic control unit programming
 - Atmospheric pressure sensor
 - Cruise control button "Resume"
 - Cruise control system
 - Overspeed frequency
 - Overspeed duration
 - Injected quantity (total)
 - Ingested air temperature sensor 1
 - Intake-air temperature sensor 2
 - Fuel quantity control valve
 - Water in fuel
 - Km reading at the last programming
- **Actuators**
 - Fuel filter warming
 - Fuel pump relay
 - valve, exhausted gases recirculation
 - Warming up control lamp
 - Air conditioner relay
 - Radiator fan stage 1
 - Radiator fan stage 2
 - Glow relay 1
 - Engine management system error lights
 - Oil pressure control light
 - Cooling agent temperature warning light
 - Speed control light
 - Throttle valves magnetic valve

					<ul style="list-style-type: none"> - Fuel water content light - Turbocharger control motor - Fuel metering block
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FIAT	Idea [350] - Idea 1.4 8V
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Year	Engine	Liters	HP	System	Functions
2004/11 - 2012/12	350 A1.000	1.4	78	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT	Idea [350] - Idea 1.6 JTD 16V
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors

2008/04 -	350 A2.000	1.6	120	<p>Tire control system Tire pressure monitor 1.1</p>	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
				<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT						Idea [350] - Idea 1.4 8V LPG	
Year	Engine	Liters	HP	System	Functions		
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature 		

2008/09 - 2012/12	350 A1.000	1.4	78	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
				Engine control Laudi Renzo LC02	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Coolant temperature - Engine revolution - emergency switch off - electric fuel pump - Engine status - Control unit, internal relay - Injection time, cylinder 1 - Injection time, cylinder 2 - Injection time, cylinder 3 - Injection time, cylinder 4 - Fuel feeding stop - LPG operation - Petrol operation - Liquefied petroleum gas level warning lamp - Liquefied petroleum gas switch - Gas tank level - Operating time - Gas switching waiting time - Gas shut-off valve current input - Control unit temperature - Dry-running operation function - Fuel mode requested

					<ul style="list-style-type: none"> - Fuel mode - Current at the fuel pump - Gas rail temperature - Gas rail pressure - Gas shut-off valve - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 • Actuators <ul style="list-style-type: none"> - emergency switch off - electrical fuel pump relay - Liquefied petroleum gas indicator lamp - Injection valve Cylinder 1 - Injection valve Cylinder 2 - Injection valve Cylinder 3 - Injection valve Cylinder 4 - Gas shut-off valve - Operating mode indicator lamp
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FIAT	Idea [350] - Idea 1.3 Multijet
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Year	Engine	Liters	HP	System	Functions
				Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> • Current values - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
<p>2008/05 -</p>	<p>199 B1.000</p>	<p>1.3</p>	<p>95</p>	<p>Engine control Diesel EDC 8DF CF5</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Throttle valve test - Quantities comparison - Glow plug test - Exhaust gas recirculation system test • Adjustments / settings - Injector quantity adjustment - Reset Lambda sensor adaptation values - HFM adaption reset - Rail pressure sensor adjustment - Differential pressure sensor adjustment - Neutral position initialization - Reset after replacement of additive filter - Turbocharger basic setting - Reset mileage with coolant temp. warnng light ON - Reset mileage with fuel water cont. lamp ON - Reset A/C /cruise control parameters - Reset after speed trigger wheel replacement - Reset after wastegate valve replacement • Special functions - Fuel tank emptying - Diesel particulate filter regeneration run • Error memory • Current values - Power supply - Oil quality - Vehicle driving speed - Accelerator pedal position - Mileage - throttle valve position - Fuel temperature - Coolant temperature - Engine control unit - Engine revolution - atmospheric pressure - Exhausted gases recirculation - Lights switch 2 - Exceeding the max revolution - Rail pressure, nominal - Rail pressure, actual - Air mass, nominal value - Air mass, actual value - Turbo pressure, nominal value - Turbo pressure, actual value - Starter activation - Acceleration pedal position sensor 1 - Acceleration pedal position sensor 2 - Fuel quantity metering device pulse-duty factor - Start permission - Throttle valve required position - Air conditioner status - Gear box transmission identification - Last oil change - Cooling agent pressure - Cooling agent compressor - Brake pedal - Throttle actuator - Final intake temperature

					<ul style="list-style-type: none"> - EGR cooling bypass solenoid valve - Mileage since temperature indicator lamp on - Mileage since fuel water content lamp on - Mileage with DPF indicator lamp ON - Clutch pedal stop - Start/stop release by Central electronics - Start/stop function - Start/stop function status - Start/stop activation prohibition - Brake booster switch - Duty cycle load pressure control - Number of electronic control unit programming - Fuel pump relay - Clutch pedal - Electronic control unit replacement required - Wastegate valve opening counter - Wastegate valve opening time - Speed control signal - Neutral position - Overspeed frequency - Overspeed duration - Injected quantity (total) - Status particle filter - Glow plug actuation - Operating switch speed - Particle filter differential pressure - Oxygen concentration - Average time last 5 regenerations - Average range of the last 5 regenerations - Average range of the last 5 regenerations - Particle filter temperature - Km reading at the last programming - km from the last DPF regeneration - Particle filter, saturation - Intake air initial temperature - Kilometer reading from the last DPF replacement - Var.turb.geom. turbocharger, specified position - Partial regeneration operations count - Mileage on lubrication service warning - Mileage on last overspeed - Number of regeneration requests - VTG turbocharger actual position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - valve, exhausted gases recirculation - Radiator fan. stage 1 - Radiator fan. stage 2 - Suction control valve - Engine management system error lights - Oil pressure control light - Charging-air pressure magnetic valve - Cooling agent temperature warning light - Speed control light - Fuel water content light - Glow control light - Cooling agent compressor - Particle filter control light
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FIAT						Idea [Fase II] - Idea 1.4 Flex	
Year	Engine	Liters	HP	System	Functions		
2010/08			80 -	Parking assisting system	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply 		

-	178F3011	1.4	82	Park Distance Control 2.0	<ul style="list-style-type: none"> - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
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FIAT Idea [Fase II] - Idea 1.6 16V Flex					
Year	Engine	Liters	HP	System	Functions
2010/08 -	310A5011	1.6	116 - 117	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Idea [Fase II] - Idea 1.8 16V Flex					
Year	Engine	Liters	HP	System	Functions
2010/08 -	370A0011	1.8	131 - 132	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Idea [Fase I] - Idea 1.4 Flex					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2010/07	178 F 3.011	1.4	80 - 81	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code

					<ul style="list-style-type: none"> - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
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FIAT						Idea [Fase I] - Idea 1.8 Flex					
Year	Engine	Liters	HP	System		Functions					
2005/09 - 2010/07	93313090- 7U	1.8	112 - 114	Tire control system Tire pressure monitor 1.1		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value 					

FIAT						Linea - Linea 1.4 16V Turbo					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification 					

2008/10 - 2012/12	198A1000	1.4	152	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
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FIAT Linea - Linea 1.9 16V Flex					
Year	Engine	Liters	HP	System	Functions
2008/10 - 2010/08	310 A 3.011	1.9	130 - 132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Linea - Linea 1.9 16V Flex Dualogic					
Year	Engine	Liters	HP	System	Functions
2008/10 - 2010/08	310 A 3.011	1.9	130 - 132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Linea - Linea 1.8 16V Flex (LX)					
Year	Engine	Liters	HP	System	Functions
2010/09 -	370A0011	1.8	127	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

- Front Park Distance Control

FIAT Linea - Linea 1.8 16V Flex Dualogic (LX)					
Year	Engine	Liters	HP	System	Functions
2010/09 -	370A0011	1.8	127	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Read configuration- Configuration save• Error memory• Current values<ul style="list-style-type: none">- Power supply- Vehicle driving speed- Reverse gear- Trailer operation- Number of electronic control unit programming- Front Park Distance Control

FIAT Linea - Linea 1.8 16V Flex					
Year	Engine	Liters	HP	System	Functions
2010/09 -	370A0011	1.8	130 - 132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Read configuration- Configuration save• Error memory• Current values<ul style="list-style-type: none">- Power supply- Vehicle driving speed- Reverse gear- Trailer operation- Number of electronic control unit programming- Front Park Distance Control

FIAT Linea - Linea 1.8 16V Flex Dualogic					
Year	Engine	Liters	HP	System	Functions
2010/09 -	370A0011	1.8	130 - 132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Read configuration- Configuration save• Error memory• Current values<ul style="list-style-type: none">- Power supply- Vehicle driving speed- Reverse gear- Trailer operation- Number of electronic control unit programming- Front Park Distance Control

FIAT Linea - Linea 1.9 16V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Read configuration

2008/10 -	310A4011	1.9	132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
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FIAT					
Linea - Linea 1.8					
Year	Engine	Liters	HP	System	Functions
2011/04 -		1.8	126	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT					
Linea [110] - Linea 1.4 16V					
Year	Engine	Liters	HP	System	Functions
2008/11 -	199 A6.000	1.4	90	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT					
Linea [110] - Linea 1.3 JTD					
Year	Engine	Liters	HP	System	Functions
2008/12 -	199 A3.000	1.3	86	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Linea [110] - Linea 1.4 i.e. 16V					
Year	Engine	Liters	HP	System	Functions
2008/12 -	199 A3.000	1.4	90	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Linea [323] - Linea 1.4					
Year	Engine	Liters	HP	System	Functions
2007/03 -	350 A1.000	1.4	77	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Linea [323] - Linea 1.4 Turbo					
Year	Engine	Liters	HP	System	Functions
2007/03 -	198 A4.000	1.4	120	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Linea [323] - Linea 1.3 Multijet					
Year	Engine	Liters	HP	System	Functions
2007/03 -	199 A3.000	1.3	90	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values

					<ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
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FIAT Linea [323] - Linea 1.6 Multijet					
Year	Engine	Liters	HP	System	Functions
2008/10 -	198 A3.000	1.6	105	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Panda '03 [169] - Panda 1.2 i.e. LPG					
Year	Engine	Liters	HP	System	Functions
2006/12 - 2009/12	188 A4.000	1.2	52 - 60	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Coolant temperature - Engine revolution - emergency switch off - electric fuel pump - Engine status - Control unit, internal relay - Injection time, cylinder 1 - Injection time, cylinder 2 - Injection time, cylinder 3 - Injection time, cylinder 4 - Fuel feeding stop - LPG operation - Petrol operation - Liquefied petroleum gas level warning lamp - Liquefied petroleum gas switch - Gas tank level - Operating time - Gas switching waiting time - Gas shut-off valve current input - Control unit temperature - Dry-running operation function - Fuel mode requested - Fuel mode - Current at the fuel pump - Gas rail temperature - Gas rail pressure - Gas shut-off valve - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3

					<ul style="list-style-type: none"> - Injection time/cylinder 4 • Actuators <ul style="list-style-type: none"> - emergency switch off - electrical fuel pump relay - Liquefied petroleum gas indicator lamp - Injection valve Cylinder 1 - Injection valve Cylinder 2 - Injection valve Cylinder 3 - Injection valve Cylinder 4 - Gas shut-off valve - Operating mode indicator lamp
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FIAT	Panda '03 [169] - Panda 1.3 JTD
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Throttle valve test - Quantities comparison - Glow plug test - Exhaust gas recirculation system test • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset Lambda sensor adaptation values - HFM adaption reset - Rail pressure sensor adjustment - Differential pressure sensor adjustment - Neutral position initialization - Reset after replacement of additive filter - Turbocharger basic setting - Reset mileage with coolant temp. warnng light ON - Reset mileage with fuel water cont. lamp ON - Reset A/C /cruise control parameters - Reset after speed trigger wheel replacement - Reset after wastegate valve replacement • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Diesel particulate filter regeneration run • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Oil quality - Vehicle driving speed - Accelerator pedal position - Mileage - throttle valve position - Fuel temperature - Coolant temperature - Engine control unit - Engine revolution - atmospheric pressure - Exhausted gases recirculation - Lights switch 2 - Exceeding the max revolution - Rail pressure, nominal - Rail pressure, actual - Air mass, nominal value - Air mass, actual value - Turbo pressure, nominal value - Turbo pressure, actual value - Starter activation - Acceleration pedal position sensor 1 - Acceleration pedal position sensor 2 - Fuel quantity metering device pulse-duty factor - Start permission

2006/05 - 2009/12	169 A1.000	1.3	75	Engine control Diesel EDC 8DF CF5	<ul style="list-style-type: none"> - Throttle valve required position - Air conditioner status - Gear box transmission identification - Last oil change - Cooling agent pressure - Cooling agent compressor - Brake pedal - Throttle actuator - Final intake temperature - EGR cooling bypass solenoid valve - Mileage since temperature indicator lamp on - Mileage since fuel water content lamp on - Mileage with DPF indicator lamp ON - Clutch pedal stop - Start/stop release by Central electronics - Start/stop function - Start/stop function status - Start/stop activation prohibition - Brake booster switch - Duty cycle load pressure control - Number of electronic control unit programming - Fuel pump relay - Clutch pedal - Electronic control unit replacement required - Wastegate valve opening counter - Wastegate valve opening time - Speed control signal - Neutral position - Overspeed frequency - Overspeed duration - Injected quantity (total) - Status particle filter - Glow plug actuation - Operating switch speed - Particle filter differential pressure - Oxygen concentration - Average time last 5 regenerations - Average range of the last 5 regenerations - Average range of the last 5 regenerations - Particle filter temperature - Km reading at the last programming - km from the last DPF regeneration - Particle filter, saturation - Intake air initial temperature - Kilometer reading from the last DPF replacement - Var.turb.geom. turbocharger, specified position - Partial regeneration operations count - Mileage on lubrication service warning - Mileage on last overspeed - Number of regeneration requests - VTG turbocharger actual position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - valve, exhausted gases recirculation - Radiator fan. stage 1 - Radiator fan. stage 2 - Suction control valve - Engine management system error lights - Oil pressure control light - Charging-air pressure magnetic valve - Cooling agent temperature warning light - Speed control light - Fuel water content light - Glow control light - Cooling agent compressor - Particle filter control light
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FIAT Panda '09 [169] - Panda 1.2 LPG					
Year	Engine	Liters	HP	System	Functions
2009/01 - 2012/12	188 A4.000	1.2	60	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Coolant temperature - Engine revolution - emergency switch off - electric fuel pump - Engine status - Control unit, internal relay - Injection time, cylinder 1 - Injection time, cylinder 2 - Injection time, cylinder 3 - Injection time, cylinder 4 - Fuel feeding stop - LPG operation - Petrol operation - Liquefied petroleum gas level warning lamp - Liquefied petroleum gas switch - Gas tank level - Operating time - Gas switching waiting time - Gas shut-off valve current input - Control unit temperature - Dry-running operation function - Fuel mode requested - Fuel mode - Current at the fuel pump - Gas rail temperature - Gas rail pressure - Gas shut-off valve - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 • Actuators <ul style="list-style-type: none"> - emergency switch off - electrical fuel pump relay - Liquefied petroleum gas indicator lamp - Injection valve Cylinder 1 - Injection valve Cylinder 2 - Injection valve Cylinder 3 - Injection valve Cylinder 4 - Gas shut-off valve - Operating mode indicator lamp

FIAT Panda '09 [169] - Panda 1.3 JTD					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Throttle valve test - Quantities comparison - Glow plug test - Exhaust gas recirculation system test • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset Lambda sensor adaptation values

2009/01
-
2010/09

188 A8.000

1.3

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Engine control
Diesel EDC 8DF CF5

- HFM adaption reset
- Rail pressure sensor adjustment
- Differential pressure sensor adjustment
- Neutral position initialization
- Reset after replacement of additive filter
- Turbocharger basic setting
- Reset mileage with coolant temp. warnng light ON
- Reset mileage with fuel water cont. lamp ON
- Reset A/C /cruise control parameters
- Reset after speed trigger wheel replacement
- Reset after wastegate valve replacement
- **Special functions**
 - Fuel tank emptying
 - Diesel particulate filter regeneration run
- **Error memory**
- **Current values**
 - Power supply
 - Oil quality
 - Vehicle driving speed
 - Accelerator pedal position
 - Mileage
 - throttle valve position
 - Fuel temperature
 - Coolant temperature
 - Engine control unit
 - Engine revolution
 - atmospheric pressure
 - Exhausted gases recirculation
 - Lights switch 2
 - Exceeding the max revolution
 - Rail pressure, nominal
 - Rail pressure, actual
 - Air mass, nominal value
 - Air mass, actual value
 - Turbo pressure, nominal value
 - Turbo pressure, actual value
 - Starter activation
 - Acceleration pedal position sensor 1
 - Acceleration pedal position sensor 2
 - Fuel quantity metering device pulse-duty factor
 - Start permission
 - Throttle valve required position
 - Air conditioner status
 - Gear box transmission identification
 - Last oil change
 - Cooling agent pressure
 - Cooling agent compressor
 - Brake pedal
 - Throttle actuator
 - Final intake temperature
 - EGR cooling bypass solenoid valve
 - Mileage since temperature indicator lamp on
 - Mileage since fuel water content lamp on
 - Mileage with DPF indicator lamp ON
 - Clutch pedal stop
 - Start/stop release by Central electronics
 - Start/stop function
 - Start/stop function status
 - Start/stop activation prohibition
 - Brake booster switch
 - Duty cycle load pressure control
 - Number of electronic control unit programming
 - Fuel pump relay
 - Clutch pedal
 - Electronic control unit replacement required
 - Wastegate valve opening counter
 - Wastegate valve opening time
 - Speed control signal

					<ul style="list-style-type: none"> - Neutral position - Overspeed frequency - Overspeed duration - Injected quantity (total) - Status particle filter - Glow plug actuation - Operating switch speed - Particle filter differential pressure - Oxygen concentration - Average time last 5 regenerations - Average range of the last 5 regenerations - Average range of the last 5 regenerations - Particle filter temperature - Km reading at the last programming - km from the last DPF regeneration - Particle filter, saturation - Intake air initial temperature - Kilometer reading from the last DPF replacement - Var.turb.geom. turbocharger, specified position - Partial regeneration operations count - Mileage on lubrication service warning - Mileage on last overspeed - Number of regeneration requests - VTG turbocharger actual position <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - valve, exhausted gases recirculation - Radiator fan. stage 1 - Radiator fan. stage 2 - Suction control valve - Engine management system error lights - Oil pressure control light - Charging-air pressure magnetic valve - Cooling agent temperature warning light - Speed control light - Fuel water content light - Glow control light - Cooling agent compressor - Particle filter control light
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FIAT						Panda '09 [169] - Panda 1.3 JTD 4x4					
Year	Engine	Liters	HP	System				Functions			
								<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Throttle valve test - Quantities comparison - Glow plug test - Exhaust gas recirculation system test • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset Lambda sensor adaptation values - HFM adaption reset - Rail pressure sensor adjustment - Differential pressure sensor adjustment - Neutral position initialization - Reset after replacement of additive filter - Turbocharger basic setting - Reset mileage with coolant temp. warnng light ON - Reset mileage with fuel water cont. lamp ON - Reset A/C /cruise control parameters - Reset after speed trigger wheel replacement - Reset after wastegate valve replacement • Special functions <ul style="list-style-type: none"> - Fuel tank emptying 			

2009/01 - 2010/09	188 A8.000	1.3	71	<p>Engine control Diesel EDC 8DF CF5</p>	<ul style="list-style-type: none"> - Diesel particulate filter regeneration run • Error memory • Current values - Power supply - Oil quality - Vehicle driving speed - Accelerator pedal position - Mileage - throttle valve position - Fuel temperature - Coolant temperature - Engine control unit - Engine revolution - atmospheric pressure - Exhausted gases recirculation - Lights switch 2 - Exceeding the max revolution - Rail pressure, nominal - Rail pressure, actual - Air mass, nominal value - Air mass, actual value - Turbo pressure, nominal value - Turbo pressure, actual value - Starter activation - Acceleration pedal position sensor 1 - Acceleration pedal position sensor 2 - Fuel quantity metering device pulse-duty factor - Start permission - Throttle valve required position - Air conditioner status - Gear box transmission identification - Last oil change - Cooling agent pressure - Cooling agent compressor - Brake pedal - Throttle actuator - Final intake temperature - EGR cooling bypass solenoid valve - Mileage since temperature indicator lamp on - Mileage since fuel water content lamp on - Mileage with DPF indicator lamp ON - Clutch pedal stop - Start/stop release by Central electronics - Start/stop function - Start/stop function status - Start/stop activation prohibition - Brake booster switch - Duty cycle load pressure control - Number of electronic control unit programming - Fuel pump relay - Clutch pedal - Electronic control unit replacement required - Wastegate valve opening counter - Wastegate valve opening time - Speed control signal - Neutral position - Overspeed frequency - Overspeed duration - Injected quantity (total) - Status particle filter - Glow plug actuation - Operating switch speed - Particle filter differential pressure - Oxygen concentration - Average time last 5 regenerations - Average range of the last 5 regenerations - Average range of the last 5 regenerations - Particle filter temperature
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					<ul style="list-style-type: none"> - Km reading at the last programming - km from the last DPF regeneration - Particle filter, saturation - Intake air initial temperature - Kilometer reading from the last DPF replacement - Var.turb.geom. turbocharger, specified position - Partial regeneration operations count - Mileage on lubrication service warning - Mileage on last overspeed - Number of regeneration requests - VTG turbocharger actual position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - valve, exhausted gases recirculation - Radiator fan. stage 1 - Radiator fan. stage 2 - Suction control valve - Engine management system error lights - Oil pressure control light - Charging-air pressure magnetic valve - Cooling agent temperature warning light - Speed control light - Fuel water content light - Glow control light - Cooling agent compressor - Particle filter control light
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FIAT					
Punto '12 [199] - Punto 1.4 LPG					
Year	Engine	Liters	HP	System	Functions
2012/01 -	350 A1.000	1.4	78	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Coolant temperature - Engine revolution - emergency switch off - electric fuel pump - Engine status - Control unit, internal relay - Injection time, cylinder 1 - Injection time, cylinder 2 - Injection time, cylinder 3 - Injection time, cylinder 4 - Fuel feeding stop - LPG operation - Petrol operation - Liquefied petroleum gas level warning lamp - Liquefied petroleum gas switch - Gas tank level - Operating time - Gas switching waiting time - Gas shut-off valve current input - Control unit temperature - Dry-running operation function - Fuel mode requested - Fuel mode - Current at the fuel pump - Gas rail temperature - Gas rail pressure - Gas shut-off valve - Injection time/cylinder 1 - Injection time/cylinder 2

					<ul style="list-style-type: none"> - Injection time/cylinder 3 - Injection time/cylinder 4 • Actuators <ul style="list-style-type: none"> - emergency switch off - electrical fuel pump relay - Liquefied petroleum gas indicator lamp - Injection valve Cylinder 1 - Injection valve Cylinder 2 - Injection valve Cylinder 3 - Injection valve Cylinder 4 - Gas shut-off valve - Operating mode indicator lamp
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FIAT	Punto Evo [199] - Punto Evo 1.4 LPG
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Year	Engine	Liters	HP	System	Functions
2009/10 - 2011/12	350 A1.000	1.4	76	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Coolant temperature - Engine revolution - emergency switch off - electric fuel pump - Engine status - Control unit, internal relay - Injection time, cylinder 1 - Injection time, cylinder 2 - Injection time, cylinder 3 - Injection time, cylinder 4 - Fuel feeding stop - LPG operation - Petrol operation - Liquefied petroleum gas level warning lamp - Liquefied petroleum gas switch - Gas tank level - Operating time - Gas switching waiting time - Gas shut-off valve current input - Control unit temperature - Dry-running operation function - Fuel mode requested - Fuel mode - Current at the fuel pump - Gas rail temperature - Gas rail pressure - Gas shut-off valve - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 • Actuators <ul style="list-style-type: none"> - emergency switch off - electrical fuel pump relay - Liquefied petroleum gas indicator lamp - Injection valve Cylinder 1 - Injection valve Cylinder 2 - Injection valve Cylinder 3 - Injection valve Cylinder 4 - Gas shut-off valve - Operating mode indicator lamp

FIAT Punto [118] - Punto 1.4 Flex					
Year	Engine	Liters	HP	System	Functions
2007/08 - 2010/06	310 A 2.011	1.4	85 - 86	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
2010/07 - 2012/07	310A2011	1.4	85 - 86	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
2012/08 -	327A011	1.4	0	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Punto [118] - Punto 1.8 Flex					
Year	Engine	Liters	HP	System	Functions
2007/08 - 2010/06	J2	1.8	112 - 114	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT Punto [118] - Punto 1.4					
Year	Engine	Liters	HP	System	Functions

Year	Engine	Liters	HP	System	Functions
2007/08 - 2012/07		1.4	87	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
2010/08 - 2012/07		1.4	87	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

FIAT						Punto [118] - Punto 1.8					
Year	Engine	Liters	HP	System	Functions						
2007/08 - 2012/07		1.8	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control 						

FIAT						Punto [118] - Punto 1.4 16V T-Jet					
Year	Engine	Liters	HP	System	Functions						
2009/02 - 2012/07	198A1000	1.4	152	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control 						

2012/08 -	1.4	152	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
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FIAT						Punto [118] - Punto 1.6 16V Flex					
Year	Engine	Liters	HP	System		Functions					
2010/07 - 2012/07	310A5011	1.6	115 - 117	Parking assisting system Park Distance Control 2.3		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control 					
2012/08 -		1.6	115 - 117	Parking assisting system Park Distance Control 2.3		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control 					

FIAT						Punto [118] - Punto 1.8 16V Flex					
Year	Engine	Liters	HP	System		Functions					
2010/07 - 2012/07	370A0011	1.8	130 - 132	Parking assisting system Park Distance Control 2.3		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control 					
						<ul style="list-style-type: none"> • Identification • Clear errors 					

2012/08 -		1.8	130 - 132	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
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FIAT						Punto [118] - Punto 1.6 16V					
Year	Engine	Liters	HP	System		Functions					
2010/08 - 2012/07	310A5011	1.6	115	Parking assisting system Park Distance Control 2.3		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control 					

FIAT						Punto [118] - Punto 1.3 16V JTD					
Year	Engine	Liters	HP	System		Functions					
2008/07 - 2012/07	199 A3.000	1.3	69	Parking assisting system Park Distance Control 2.3		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control 					

FIAT						Qubo [300] - Qubo 1.3 Multijet					
Year	Engine	Liters	HP	System		Functions					
2008/09 -	199 A2.000	1.3	75	Parking assisting system Park Distance Control 4.1		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming 					

2010/09 -	199 B1.000	1.3	95	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming
2010/06 -	199 A9.000	1.3	75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

FIAT					
Qubo [300] - Qubo 1.4					
Year	Engine	Liters	HP	System	Functions
2008/09 -	KFV	1.4	73 - 75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming
2010/06 -	KFT	1.4	73	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

FIAT					
Qubo [300] - Qubo 1.4 Natural Power					
Year	Engine	Liters	HP	System	Functions
2009/10			69 -	Parking assisting system	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory

-	350 A1.000	1.4	78	Park Distance Control 4.1	<ul style="list-style-type: none"> • Current values - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming
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FIAT						Scudo '07 [270] - Scudo 1.6 D Multijet					
Year	Engine	Liters	HP	System		Functions					
2007/01 -	9HU	1.6	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve 					
2012/03 -	9H07	1.6	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve 					

FIAT						Scudo '07 [270] - Scudo 2.0 D Multijet					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification • Clear errors • Error memory 					

2007/01 -	RHK	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2008/10 -	RHG	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2011/04 -	RH02	2.0	128	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

FIAT Scudo '07 [270] - Scudo 2.0					
Year	Engine	Liters	HP	System	Functions
2007/03 -	RFH	2.0	140	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

FIAT Stilo - Stilo 1.8 MPI 8V					
Year	Engine	Liters	HP	System	Functions
2002/06 - 2005/09	7D	1.8	103	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo - Stilo 1.8 MPI 16V					
Year	Engine	Liters	HP	System	Functions
2002/06 - 2004/12	8D	1.8	122	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo - Stilo 2.4 MPI 20V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification

2002/06 - 2008/12	192 A7.011	2.4	167	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
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FIAT Stilo - Stilo 1.8 MPI 8V Flex					
Year	Engine	Liters	HP	System	Functions
2005/10 - 2010/11	93337154J1	1.8	112 - 114	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo - Stilo 1.8 MPI 8V Flex Dualogic					
Year	Engine	Liters	HP	System	Functions
2008/02 - 2010/11	Y1	1.8	112 - 114	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo '01 [192] - Stilo 1.6 16V					
Year	Engine	Liters	HP	System	Functions
2001/10 - 2003/12	182 B6.000	1.6	103	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo '01 [192] - Stilo 2.4 20V					
Year	Engine	Liters	HP	System	Functions
2001/10				Parking assisting system	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

- 2003/12	192 A2.000	2.4	170	Park Distance Control 2.0	<ul style="list-style-type: none"> - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
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FIAT Stilo '01 [192] - Stilo 1.9 JTD 8V					
Year	Engine	Liters	HP	System	Functions
2001/10 - 2003/12	192 A1.000	1.9	115	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo '01 [192] - Stilo 1.8 16V					
Year	Engine	Liters	HP	System	Functions
2001/10 - 2003/12	192 A4.000	1.8	133	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo '04 [192] - Stilo 1.6 16V					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	182 B6.000	1.6	103	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
2005/07 - 2007/12	192 B3.000	1.6	105	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo '04 [192] - Stilo 1.9 JTD 8V					
Year	Engine	Liters	HP	System	Functions

FIAT Stilo '04 [192] - Stilo 1.4 16V					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	192 B2.000	1.4	90	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo Multi Wagon [192] - Stilo 1.8 16V S.W.					
Year	Engine	Liters	HP	System	Functions
2002/10 - 2007/12	192 A4.000	1.8	133	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo Multi Wagon [192] - Stilo 1.6 16V S.W.					
Year	Engine	Liters	HP	System	Functions
2002/10 - 2007/12	182 B6.000	1.6	103	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
2005/07 - 2007/12	192 B3.000	1.6	105	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo Multi Wagon [192] - Stilo 1.9 JTD 8V S.W.					
Year	Engine	Liters	HP	System	Functions
2002/10				Parking assisting system	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

- 2007/12	192 A1.000	1.9	115	Park Distance Control 2.0	<ul style="list-style-type: none"> - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
2004/09 - 2007/12	192 A9.000	1.9	100	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
2005/07 - 2007/12	192 A8.000	1.9	120	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo Multi Wagon [192] - Stilo 1.4 16V S.W.					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	843 A1.000	1.4	95	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
2004/09 - 2007/12	192 B2.000	1.4	90	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo Multi Wagon [192] - Stilo 1.9 JTD 16V S.W.					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	192 A5.000	1.9	140	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear

					<ul style="list-style-type: none"> - Trailer operation - System
2004/09 - 2007/12	192 B1.000	1.9	136	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
2005/07 - 2007/12	937 A5.000	1.9	150	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Stilo Multi Wagon [192] - Stilo 2.4 20V S.W.					
Year	Engine	Liters	HP	System	Functions
2004/01 - 2007/12	192 A2.000	2.4	170	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

FIAT Ulysse '03 [179] - Ulysse 2.0 16V					
Year	Engine	Liters	HP	System	Functions
2002/10 - 2005/10	RFN	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump

- Fuel metering valve

FIAT						Ulysse '03 [179] - Ulysse 2.0 16V JTD					
Year	Engine	Liters	HP	System		Functions					
2002/10 - 2006/01	RHW	2.0	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve 					
2003/06 - 2006/01	RHM	2.0	107	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve 					
2006/02 - 2010/12	RHK	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection 					

					<ul style="list-style-type: none"> - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
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FIAT Ulysse '03 [179] - Ulysse 2.2 16V JTD

Year	Engine	Liters	HP	System	Functions
2002/10 - 2007/09	4HW	2.2	128	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2007/10 - 2010/12	4H...	2.2	163	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

FIAT Ulysse '03 [179] - Ulysse 3.0 V6 24V

Year	Engine	Liters	HP	System	Functions
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2003/01 - 2005/10	XFW	3.0	204	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
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[C-MAX '07 \[DM2\] - C-MAX 1.6](#)
[C-MAX '07 \[DM2\] - C-MAX 1.8](#)
[C-MAX '07 \[DM2\] - C-MAX 1.8 FFV](#)
[C-MAX '07 \[DM2\] - C-MAX 2.0](#)
[C-MAX '07 \[DM2\] - C-MAX 1.6 TDCi](#)
[C-MAX '07 \[DM2\] - C-MAX 2.0 TDCi](#)
[C-MAX '07 \[DM2\] - C-MAX 2.0 CNG](#)
[C-MAX '07 \[DM2\] - C-MAX 1.8 TDCi](#)
[C-MAX '07 \[DM2\] - C-MAX 2.0 LPG](#)
[C-MAX '11 \[DXA\] - C-MAX 1.6 Ti-VCT](#)
[C-MAX '11 \[DXA\] - C-MAX 1.6 Ti-VCT FlexiFuel](#)
[C-MAX '11 \[DXA\] - C-MAX 1.6 EcoBoost](#)
[C-MAX '11 \[DXA\] - C-MAX 1.6 TDCi](#)
[C-MAX '11 \[DXA\] - C-MAX 2.0 TDCi](#)
[C-MAX '11 \[DXA\] - C-MAX 1.0 EcoBoost](#)
[Fiesta - Fiesta 1.6](#)
[Fiesta '08 \[JD, JH\] - Fiesta 1.25i](#)
[Fiesta '08 \[JD, JH\] - Fiesta 1.4i](#)
[Fiesta '08 \[JD, JH\] - Fiesta 1.6 Ti-VCT](#)
[Fiesta '08 \[JD, JH\] - Fiesta 1.4 TDCi](#)
[Fiesta '08 \[JD, JH\] - Fiesta 1.6 TDCi](#)
[Fiesta '08 \[JD, JH\] - Fiesta 1.4 LPG](#)
[Fiesta '08 \[JD, JH\] - Fiesta 1.6 Ti-VCT Sport S](#)
[Fiesta '13 \[JA8, JR8\] - Fiesta 1.4 LPG](#)
[Fiesta '13 \[JA8, JR8\] - Fiesta 1.4](#)
[Fiesta \[B252-299\] - Fiesta 1.4i](#)
[Focus '04 - Focus 1.8i](#)
[Focus '04 \[DA3\] - Focus 1.6i](#)
[Focus '04 \[DA3\] - Focus 1.6 Ti-VCT](#)
[Focus '04 \[DA3\] - Focus 2.0i](#)
[Focus '04 \[DA3\] - Focus 1.6 TDCi](#)
[Focus '04 \[DA3\] - Focus 2.0 TDCi](#)
[Focus '04 \[DA3\] - Focus 1.8 TDCi](#)
[Focus '04 \[DA3\] - Focus 2.5i ST](#)
[Focus '04 \[DA3\] - Focus 1.8 FFV](#)
[Focus '04 \[DA3\] - Focus 1.8i](#)
[Focus '04 \[DA3\] Turnier - Focus 1.6 TDCi Turnier](#)
[Focus '04 \[DA3\] Turnier - Focus 1.6 Ti-VCT Turnier](#)
[Focus '04 \[DA3\] Turnier - Focus 1.6i Turnier](#)
[Focus '04 \[DA3\] Turnier - Focus 2.0 TDCi Turnier](#)
[Focus '04 \[DA3\] Turnier - Focus 2.0i Turnier](#)
[Focus '04 \[DA3\] Turnier - Focus 1.8 TDCi Turnier](#)
[Focus '04 \[DA3\] Turnier - Focus 1.8 FFV Turnier](#)
[Focus '04 \[DA3\] Turnier - Focus 1.8i Turnier](#)
[Focus '04 \[DB3\] - Focus 1.6 Ti-VCT](#)
[Focus '04 \[DB3\] - Focus 1.6i](#)

[Focus '04 \[DB3\] - Focus 2.0 TDCi](#)
[Focus '04 \[DB3\] - Focus 2.0i](#)
[Focus '04 \[DB3\] - Focus 1.8 TDCi](#)
[Focus '04 \[DB3\] - Focus 1.8 FFV](#)
[Focus '04 \[DB3\] - Focus 1.8i](#)
[Focus '08 \[FF\] Turnier - Focus 1.6 Ti-VCT Turnier](#)
[Focus '11 \[DYA, DYB\] - Focus 1.6 Ti-VCT](#)
[Focus '11 \[DYA, DYB\] - Focus 1.6 EcoBoost](#)
[Focus '11 \[DYA, DYB\] - Focus 1.6 TDCi](#)
[Focus '11 \[DYA, DYB\] - Focus 2.0 TDCi](#)
[Focus '11 \[DYA, DYB\] - Focus 1.6 Ti-VCT FlexiFuel](#)
[Focus '11 \[DYA, DYB\] - Focus 2.0 GDI Ti-VCT](#)
[Focus '11 \[DYA, DYB\] - Focus 1.0 EcoBoost](#)
[Focus '11 \[DYA, DYB\] - Focus 1.6 TDCi ECONetic](#)
[Focus '11 \[DYA, DYB\] - Focus 2.0 EcoBoost ST](#)
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.6 EcoBoost Turnier](#)
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.6 TDCi Turnier](#)
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.6 Ti-VCT Turnier](#)
[Focus '11 \[DYA, DYB\] Turnier - Focus 2.0 TDCi Turnier](#)
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.6 Ti-VCT FlexiFuel Turnier](#)
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.0 EcoBoost Turnier](#)
[Focus '11 \[DYA, DYB\] Turnier - Focus 1.6 TDCi ECONetic Turnier](#)
[Focus '11 \[DYA, DYB\] Turnier - Focus 2.0 EcoBoost ST Turnier](#)
[Focus '11 \[DYA, DYB\] Turnier - Focus 2.0 GDI Ti-VCT Turnier](#)
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.6](#)
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.8](#)
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.6 TDCi](#)
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 2.0 TDCi](#)
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 2.0](#)
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.6 Ti-VCT](#)
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.8 TDCi](#)
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 1.8 FFV](#)
[Focus C-MAX '04 \[DM2\] - Focus C-MAX 2.0 CNG](#)
[Focus \[Fase II\] - Focus 1.6i 16V Flex](#)
[Focus \[Fase II\] - Focus Sedan 1.6i 16V Flex](#)
[Fusion - Fusion 1.6 Diesel Turbo 8V](#)
[Fusion - Fusion 1.4 Diesel 8V](#)
[Galaxy '06 \[WA6\] - Galaxy 2.0](#)
[Galaxy '06 \[WA6\] - Galaxy 1.8 TDCi](#)
[Galaxy '06 \[WA6\] - Galaxy 2.0 TDCi](#)
[Galaxy '06 \[WA6\] - Galaxy 2.3](#)
[Galaxy '06 \[WA6\] - Galaxy 2.2 TDCi](#)
[Galaxy '06 \[WA6\] - Galaxy 2.0 FlexiFuel](#)
[Galaxy '06 \[WA6\] - Galaxy 2.0 EcoBoost SCTi](#)
[Galaxy '06 \[WA6\] - Galaxy 1.6 EcoBoost](#)
[Galaxy '06 \[WA6\] - Galaxy 1.6 TDCi](#)
[Kuga '08 \[DM2\] - Kuga 2.0 TDCi](#)
[Kuga '08 \[DM2\] - Kuga 2.0 TDCi 4x4](#)

[Kuga '08 \[DM2\] - Kuga 2.5i 4x4](#)
[Kuga '13 \[DM2\] - Kuga 2.0 TDCi](#)
[Kuga '13 \[DM2\] - Kuga 2.0 TDCi 4x4](#)
[Kuga '13 \[DM2\] - Kuga 1.6 EcoBoost](#)
[Kuga '13 \[DM2\] - Kuga 1.6 EcoBoost 4x4](#)
[Mondeo - Mondeo 2.0i](#)
[Mondeo - Mondeo 2.3i](#)
[Mondeo '07 \[BD7\] - Mondeo 2.0](#)
[Mondeo '07 \[BD7\] - Mondeo 2.5](#)
[Mondeo '07 \[BD7\] - Mondeo 2.0 TDCi](#)
[Mondeo '07 \[BD7\] - Mondeo 2.3](#)
[Mondeo '07 \[BD7\] - Mondeo 2.2 TDCi](#)
[Mondeo '07 \[BD7\] - Mondeo 1.8 TDCi](#)
[Mondeo '07 \[BD7\] - Mondeo 1.6 Ti-VCT](#)
[Mondeo '07 \[BD7\] - Mondeo 2.0 Flexifuel](#)
[Mondeo '07 \[BD7\] - Mondeo 2.0 LPG](#)
[Mondeo '07 \[BD7\] - Mondeo 2.0 EcoBoost SCTi](#)
[Mondeo '07 \[BD7\] - Mondeo 1.6 EcoBoost](#)
[Mondeo '07 \[BD7\] - Mondeo 1.6 TDCi](#)
[Mondeo '07 \[BD7\] - Mondeo 1.8 TDCi eco](#)
[Mondeo '07 \[BD7\] - Mondeo 2.0 TDCi eco](#)
[Mondeo '07 \[BE7\] - Mondeo 1.6 Ti-VCT](#)
[Mondeo '07 \[BE7\] - Mondeo 2.0](#)
[Mondeo '07 \[BE7\] - Mondeo 2.5](#)
[Mondeo '07 \[BE7\] - Mondeo 1.8 TDCi](#)
[Mondeo '07 \[BE7\] - Mondeo 2.0 TDCi](#)
[Mondeo '07 \[BE7\] - Mondeo 2.3](#)
[Mondeo '07 \[BE7\] - Mondeo 2.2 TDCi](#)
[Mondeo '07 \[BE7\] - Mondeo 2.0 Flexifuel](#)
[Mondeo '07 \[BE7\] - Mondeo 2.0 LPG](#)
[Mondeo '07 \[BE7\] - Mondeo 2.0 EcoBoost SCTi](#)
[Mondeo '07 \[BE7\] - Mondeo 1.6 EcoBoost](#)
[Mondeo '07 \[BE7\] - Mondeo 1.6 TDCi](#)
[Mondeo '07 \[BE7\] - Mondeo 1.8 TDCi eco](#)
[Mondeo '07 \[BE7\] - Mondeo 2.0 TDCi eco](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 1.6 Ti-VCT Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.5 Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 1.8 TDCi Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 TDCi Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.3 Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.2 TDCi Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 Flexifuel Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 LPG Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 EcoBoost SCTi Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 1.6 EcoBoost Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 1.6 TDCi Turnier](#)
[Mondeo '07 \[BG7\] Turnier - Mondeo 1.8 TDCi Turnier eco](#)

[Mondeo '07 \[BG7\] Turnier - Mondeo 2.0 TDCi Turnier eco](#)

[S-MAX '06 - S-MAX 2.3i](#)

[S-MAX '06 \[WA6\] - S-MAX 2.0 TDCi](#)

[S-MAX '06 \[WA6\] - S-MAX 2.0](#)

[S-MAX '06 \[WA6\] - S-MAX 2.5](#)

[S-MAX '06 \[WA6\] - S-MAX 1.8 TDCi](#)

[S-MAX '06 \[WA6\] - S-MAX 2.3](#)

[S-MAX '06 \[WA6\] - S-MAX 2.2 TDCi](#)

[S-MAX '06 \[WA6\] - S-MAX 2.0 FlexiFuel](#)

[S-MAX '06 \[WA6\] - S-MAX 2.0 EcoBoost SCTi](#)

[S-MAX '06 \[WA6\] - S-MAX 1.6 EcoBoost](#)

[S-MAX '06 \[WA6\] - S-MAX 1.6 TDCi](#)

[Transit - Transit 2.8D](#)

[Transit '06 - Transit FT 300 2.2 TDCi](#)

[Transit '06 - Transit FT 330 2.3i](#)

[Transit '06 - Transit FT 260 2.2 TDCi](#)

[Transit '06 - Transit FT 330 2.4 TDCi](#)

[Transit '06 - Transit FT 350 3.2 TDCi](#)

[Transit '06 - Transit FT 330 2.3i CNG](#)

[Transit '06 - Transit FT 330 2.4 TDCi 4x4](#)

[Transit '06 - Transit FT 280 2.2 TDCi](#)

[Transit '06 - Transit FT 330 2.2 TDCi](#)

[Transit '06 - Transit FT 350 2.2 TDCi](#)

[Transit '06 - Transit FT 330 2.3i LPG](#)

[Transit '06 - Transit FT 350 2.3i](#)

[Transit '06 - Transit FT 350 2.3i CNG](#)

[Transit '06 - Transit FT 350 2.3i LPG](#)

[Transit '06 - Transit FT 350 2.4 TDCi](#)

[Transit '06 - Transit FT 430 2.4 TDCi](#)

[Transit '06 - Transit FT 300 2.4 TDCi](#)

[Transit '06 - Transit FT 460 2.4 TDCi](#)

[Transit '06 - Transit FT 350 2.4 TDCi 4x4](#)

[Transit '06 - Transit FT 460 3.2 TDCi](#)

[Transit '06 - Transit FT 300 2.3i](#)

[Transit '12 - Transit FT 250 2.2 TDCi](#)

[Transit '12 - Transit FT 260 2.2 TDCi](#)

[Transit '12 - Transit FT 280 2.2 TDCi](#)

[Transit '12 - Transit FT 300 2.2 TDCi](#)

[Transit '12 - Transit FT 330 2.2 TDCi](#)

[Transit '12 - Transit FT 350 2.2 TDCi](#)

[Transit '12 - Transit FT 350 2.2 TDCi HDT](#)

[Transit '12 - Transit FT 370 2.2 TDCi](#)

[Transit '12 - Transit FT 430 2.2 TDCi](#)

[Transit '12 - Transit FT 430 2.2 TDCi HDT](#)

[Transit '12 - Transit FT 460 2.2 TDCi](#)

[Transit '12 - Transit FT 460 2.2 TDCi HDT](#)

[Transit Euroline '06 - Transit Euroline 2.2 TDCi](#)

[Transit Euroline '12 - Transit Euroline 2.2 TDCi](#)

[Transit Nugget '06 - Transit Nugget 2.2 TDCi](#)

[Transit Nugget '12 - Transit Nugget 2.2 TDCi](#)

[Transit Tourneo '06 - Transit Tourneo 2.2 TDCi](#)

[Transit Tourneo '12 - Transit Tourneo 2.2 TDCi](#)

FORD						C-MAX '07 [DM2] - C-MAX 1.6	
Year	Engine	Liters	HP	System	Functions		
2007/03 - 2010/07		1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 		

FORD						C-MAX '07 [DM2] - C-MAX 1.8	
Year	Engine	Liters	HP	System	Functions		
2007/03 - 2010/07		1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 		

FORD						C-MAX '07 [DM2] - C-MAX 1.8 FFV	
Year	Engine	Liters	HP	System	Functions		
2007/03 - 2010/07		1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance 		

					<ul style="list-style-type: none"> - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD C-MAX '07 [DM2] - C-MAX 2.0					
Year	Engine	Liters	HP	System	Functions
2007/03 - 2010/07		2.0	145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD C-MAX '07 [DM2] - C-MAX 1.6 TDCi					
Year	Engine	Liters	HP	System	Functions
2007/03 - 2010/07		1.6	90	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD C-MAX '07 [DM2] - C-MAX 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
2007/03 - 2010/07		2.0	136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status

					<ul style="list-style-type: none"> - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2008/02 - 2010/07		2.0	110	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD C-MAX '07 [DM2] - C-MAX 2.0 CNG					
Year	Engine	Liters	HP	System	Functions
2007/03 - 2010/07		2.0	126 - 145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD C-MAX '07 [DM2] - C-MAX 1.8 TDCi					
Year	Engine	Liters	HP	System	Functions
2007/03 - 2010/07	KKDA	1.8	115	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance

					<ul style="list-style-type: none"> - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD C-MAX '07 [DM2] - C-MAX 2.0 LPG					
Year	Engine	Liters	HP	System	Functions
2007/03 - 2010/07		2.0	141 - 146	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD C-MAX '11 [DXA] - C-MAX 1.6 Ti-VCT					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed

					<ul style="list-style-type: none"> - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
2010/08	IQD...	1.6	105	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
					<ul style="list-style-type: none"> • Identification • Clear errors

				<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
			<p>Parking assisting system Park Distance Control V6.0</p>	
			<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory

2011/08 -	XTDA	1.6	85	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Current values - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Sunlight sensor test • Error memory • Current values - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle

					<ul style="list-style-type: none"> - Number of actual errors - Current mileage • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				<p>Parking assisting system Park Distance Control V6.0</p>	
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD				C-MAX '11 [DXA] - C-MAX 1.6 Ti-VCT FlexiFuel	
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors

2010/08 -	MUDA	1.6	117 - 120	<p>Anti-block system ESP V6.0</p> <p>Heating / Air conditioner Automatic A/C V6.0</p> <p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor <hr/> <ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature <hr/> <ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
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				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD					C-MAX '11 [DXA] - C-MAX 1.6 EcoBoost	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side 	

					<ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
2010/08	JQD...	1.6	150	Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch

					<ul style="list-style-type: none"> - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD

C-MAX '11 [DXA] - C-MAX 1.6 TDCi

Year	Engine	Liters	HP	System	Functions
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<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner

2010/08 -	T3D...	1.6	95	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp

- Yellow warning lamp
- Door locking, indication light
- ABS warning light

FORD					C-MAX '11 [DXA] - C-MAX 2.0 TDCi	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side 	
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor 	
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature 	

2010/08 -	TYDA	2.0	115		- Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				Instrument cluster	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light

				Instrument cluster V6.0	<ul style="list-style-type: none"> - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
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FORD C-MAX '11 [DXA] - C-MAX 1.0 EcoBoost

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps

2012/10 -	M1DA	1.0	125	Automatic A/C V6.0	<ul style="list-style-type: none"> - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors

				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
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FORD					Fiesta - Fiesta 1.6	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector 	
				Airbag Airbag V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front 	

2010/09 -		1.6	120		<ul style="list-style-type: none"> - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
		1.6	120	Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal

				Central electronics Central electronics V5.0	<ul style="list-style-type: none"> - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
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FORD	Fiesta '08 [JD, JH] - Fiesta 1.25i
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Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
				Airbag Airbag V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side

2008/07 - 2012/11	STJ...	1.2	60	<p>Instrument cluster Instrument cluster V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				<p>Anti-block system ESP V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				<p>Anti-block system ABS V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Pump motor - Brake pedal switch

				<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
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FORD				Fiesta '08 [JD, JH] - Fiesta 1.4i	
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
				<p>Airbag Airbag V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side

2008/07 - 2012/11	SPJ...	1.4	96 - 97		<ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

			Anti-block system ABS V5.0	<ul style="list-style-type: none"> - Driving speed - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Pump motor - Brake pedal switch
			Central electronics Central electronics V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch

FORD					Fiesta '08 [JD, JH] - Fiesta 1.6 Ti-VCT	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector 	
					<ul style="list-style-type: none"> • Identification • Clear errors 	

2008/07 - 2012/11	HXJ...	1.6	120	Airbag Airbag V5.0	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right

				<ul style="list-style-type: none"> - Pressure sensor
			<p>Anti-block system ABS V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch
			<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
			<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector

2008/07 - 2009/08	RVJA	1.6	120	Airbag Airbag V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right

					<ul style="list-style-type: none"> - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch

FORD					
Fiesta '08 [JD, JH] - Fiesta 1.4 TDCi					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

2008/07 - 2012/11	F6J...	1.4	68	Airbag Airbag V5.0	<ul style="list-style-type: none"> - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
					• Identification

			Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch
			Central electronics Central electronics V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
			Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

2010/09 - 2012/11	KVJA	1.4	69	Airbag Airbag V5.0	<ul style="list-style-type: none"> • Current values - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor

				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch
			<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch 	

FORD				Fiesta '08 [JD, JH] - Fiesta 1.6 TDCi	
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button

2008/07 - 2012/11	HHJ...	1.6	90		<ul style="list-style-type: none"> - Central discharge temperature - Heated windshield button - Temperature selector
				Airbag Airbag V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor 				

				<ul style="list-style-type: none"> - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
			Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch
			Central electronics Central electronics V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
			Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap

					<ul style="list-style-type: none"> - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
				Airbag Airbag V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2009/01 - 2012/11	HHJF	1.6	75	Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values

			ESP V5.0	<ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
			Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch
			Central electronics Central electronics V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
			Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor

2010/03 - 2012/11	TZJ...	1.6	95		<ul style="list-style-type: none"> - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
				Airbag Airbag V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch
				Central electronics Central electronics V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch

					<ul style="list-style-type: none"> - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
2010/04 - 2012/11	UBJA	1.6	75	Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
				Airbag Airbag V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor

				<ul style="list-style-type: none"> - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
			<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
			<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side

2012/02 - 2012/11	T3JA	1.6	95	Airbag Airbag V5.0	<ul style="list-style-type: none"> - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> • Current values - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
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FORD **Fiesta '08 [JD, JH] - Fiesta 1.4 LPG**

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
				<p>Airbag Airbag V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side

2009/05 - 2012/11	RTJ...	1.4	92 - 97		<ul style="list-style-type: none"> - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed 				

					<ul style="list-style-type: none"> - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch
			Central electronics Central electronics V5.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch

FORD					
Fiesta '08 [JD, JH] - Fiesta 1.6 Ti-VCT Sport S					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

2011/01 - 2012/11	U5JA	1.6	134	Airbag Airbag V5.0	<ul style="list-style-type: none"> - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
					<ul style="list-style-type: none"> • Identification

				<p>Central electronics Central electronics V5.0</p>	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
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FORD	Fiesta '13 [JA8, JR8] - Fiesta 1.4 LPG
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Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp

2012/11 -	RTJB	1.4	92 - 97	Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Pump motor - Brake pedal switch
				Central electronics	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch

				Central electronics V5.0	<ul style="list-style-type: none"> - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
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FORD **Fiesta '13 [JA8, JR8] - Fiesta 1.4**

Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
2012/11 -	SPJC	1.4	97	Instrument cluster Instrument cluster V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light

					<ul style="list-style-type: none"> - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch
				Central electronics Central electronics V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch

FORD					Fiesta [B252-299] - Fiesta 1.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - temperature sensor for middle air flow - temperature sensor for the lower salon part (feet) - Display brightness - AC switch 	

				<p>Heating / Air conditioner Automatic A/C V5.0</p>	<ul style="list-style-type: none"> - Rear window preheating switch - Actual position, air distribution flaps - Actual position Mixed air flap - Requested temperature - Key Auto - Key Defrost - Air distribution button upwards - Air distribution button center - Air distribution button downward - Air conditioner evaporator temperature - Footwell vent temperature - Air circulation flaps key button - Passenger compartment temperature sensor - Fresh air fan control - Current position fresh air / ventilation flap - Function key illumination level - Off button - Central discharge temperature - Heated windshield button - Temperature selector
<p>2010/09 -</p>	<p>SPJA</p>	<p>1.4</p>	<p>95</p>	<p>Instrument cluster Instrument cluster V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Exhausted gases signal lamp - Instrument panel illumination - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Number of authorized keys - Display - ABS warning light - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Fuel level meter - Rotational speed sensor - Tachometer - Fuel gauge reading 25 % - Fuel gauge reading 50 % - Fuel gauge reading 75 % - Fuel gauge reading 100 % - Rev counter 1000 1/min - Rev counter 3000 1/min - Rev counter 5000 1/min - Speedometer 30 km/h - Speedometer 50 km/h - Speedometer 100 km/h - Speedometer 220 km/h
				<p>Anti-block system ESP V5.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor

					<ul style="list-style-type: none"> - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch
				Central electronics Central electronics V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch

FORD					Focus '04 - Focus 1.8i	
Year	Engine	Liters	HP	System	Functions	
2005/10 -		1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 	

FORD Focus '04 [DA3] - Focus 1.6i					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	HWD...	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2007/03 - 2008/01	SHDA	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DA3] - Focus 1.6 Ti-VCT					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	HXD...	1.6	115	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	AOD...	2.0	145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DA3] - Focus 1.6 TDCi					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	G8D...	1.6	109	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DA3] - Focus 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	G6D...	2.0	133 - 136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front

- Alert sensor, rear

FORD Focus '04 [DA3] - Focus 1.8 TDCi					
Year	Engine	Liters	HP	System	Functions
2005/04 - 2008/01	KKD...	1.8	115	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DA3] - Focus 2.5i ST					
Year	Engine	Liters	HP	System	Functions
2005/10 - 2008/01	HYDA	2.5	226	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DA3] - Focus 1.8 FFV					
Year	Engine	Liters	HP	System	Functions
2005/05 - 2008/01	Q7DA	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance

					<ul style="list-style-type: none"> - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD Focus '04 [DA3] - Focus 1.8i					
Year	Engine	Liters	HP	System	Functions
2005/05 - 2008/01	QQDB	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DA3] Turnier - Focus 1.6 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	G8D...	1.6	109	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DA3] Turnier - Focus 1.6 Ti-VCT Turnier					
Year	Engine	Liters	HP	System	Functions
2004/07				Parking assisting system	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside

- 2008/01	HXD...	1.6	115	Park Distance Control M5.0	<ul style="list-style-type: none"> - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD Focus '04 [DA3] Turnier - Focus 1.6i Turnier					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	HWD...	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2007/03 - 2008/01	SHDA	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DA3] Turnier - Focus 2.0 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	G6D...	2.0	133 - 136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside

					<ul style="list-style-type: none"> - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD Focus '04 [DA3] Turnier - Focus 2.0i Turnier					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	AOD...	2.0	145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DA3] Turnier - Focus 1.8 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
2005/04 - 2008/01	KKD...	1.8	115	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DA3] Turnier - Focus 1.8 FFV Turnier					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection

2005/05 - 2008/01	Q7DA	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD Focus '04 [DA3] Turnier - Focus 1.8i Turnier					
Year	Engine	Liters	HP	System	Functions
2005/05 - 2008/01	QQDB	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DB3] - Focus 1.6 Ti-VCT					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	HXD...	1.6	116	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '04 [DB3] - Focus 1.6i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors

2004/07 - 2008/01	HWD...	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2007/03 - 2008/01	SHDA	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Focus '04 [DB3] - Focus 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
2004/07 - 2008/01	G6D...	2.0	133 - 136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Focus '04 [DB3] - Focus 2.0i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

2004/07 - 2008/01	AOD...	2.0	145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Current values - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD						Focus '04 [DB3] - Focus 1.8 TDCi					
Year	Engine	Liters	HP	System		Functions					
2005/04 - 2008/01	KKD...	1.8	115	Parking assisting system Park Distance Control M5.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 					

FORD						Focus '04 [DB3] - Focus 1.8 FFV					
Year	Engine	Liters	HP	System		Functions					
2004/07 - 2008/01	Q7DA	1.8	125	Parking assisting system Park Distance Control M5.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 					

FORD						Focus '04 [DB3] - Focus 1.8i					
Year	Engine	Liters	HP	System		Functions					

Year	Engine	Liters	HP	System	Functions
2005/05 - 2008/01	QQDB	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus '08 [FF] Turnier - Focus 1.6 Ti-VCT Turnier					
Year	Engine	Liters	HP	System	Functions
2007/12 - 2011/12	SIDA	1.6	115 - 120	Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal

FORD Focus '11 [DYA, DYB] - Focus 1.6 Ti-VCT					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat

					<ul style="list-style-type: none"> - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
2011/01 -	IQD...	1.6	105	Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay

				<ul style="list-style-type: none"> - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
			Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
			Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
			Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side

				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay
2011/08 -	XTDA	1.6	86		

				<ul style="list-style-type: none"> - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
			Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
			Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
			Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

				<ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
			<p>Airbag Airbag G9.0</p>	
			<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
			<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch
2012/02	XTDA	1.6	86	

			<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
			<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
			<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
			<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
					<ul style="list-style-type: none"> • Identification

2011/01 -	JQD...	1.6	150	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light

					<ul style="list-style-type: none"> - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
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FORD					
Focus '11 [DYA, DYB] - Focus 1.6 TDCi					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control

2011/01 -	T3D...	1.6	95		<ul style="list-style-type: none"> - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp

				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
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FORD					
Focus '11 [DYA, DYB] - Focus 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests

2011/01 -	TYDA	2.0	115	<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance

					<ul style="list-style-type: none"> - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD	Focus '11 [DYA, DYB] - Focus 1.6 Ti-VCT FlexiFuel
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Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch

2011/01 -	MUDA	1.6	117 - 120		<ul style="list-style-type: none"> - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear

				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD Focus '11 [DYA, DYB] - Focus 2.0 GDI Ti-VCT					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor

2011/09 -	XQDA	2.0	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution

					<ul style="list-style-type: none"> - Steering wheel rotation angle - Number of actual errors - Current mileage
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD					
Focus '11 [DYA, DYB] - Focus 1.0 EcoBoost					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification

2012/02 -	M2DA	1.0	101	<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal

					- Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD					Focus '11 [DYA, DYB] - Focus 1.6 TDCi ECOnetic	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side 	

					<ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
2012/06	NGD...	1.6	105	Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch

					<ul style="list-style-type: none"> - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD				Focus '11 [DYA, DYB] - Focus 2.0 EcoBoost ST	
Year	Engine	Liters	HP	System	Functions

<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner

2012/06 -	R9DA	2.0	250	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp

- Yellow warning lamp
- Door locking, indication light
- ABS warning light

FORD Focus '11 [DYA, DYB] Turnier - Focus 1.6 EcoBoost Turnier					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature

2011/01 -	JQD...	1.6	150		- Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				Instrument cluster	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light

				Instrument cluster V6.0	<ul style="list-style-type: none"> - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
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FORD Focus '11 [DYA, DYB] Turnier - Focus 1.6 TDCi Turnier

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps

2011/01 -	T1D...	1.6	115	Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors

				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
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FORD					
Focus '11 [DYA, DYB] Turnier - Focus 1.6 Ti-VCT Turnier					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor

				<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
2011/01	IQD...	1.6	105	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside

				<ul style="list-style-type: none"> - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
			Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
			Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
			Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right

2012/02 -	XTDA	1.6	86		<ul style="list-style-type: none"> - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside

				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD					
Focus '11 [DYA, DYB] Turnier - Focus 2.0 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values

2011/01 -	TXDB	2.0	163	ESP V6.0	<ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors

				<ul style="list-style-type: none"> - Current mileage • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
			<p>Parking assisting system Park Distance Control V6.0</p>	
			<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD Focus '11 [DYA, DYB] Turnier - Focus 1.6 Ti-VCT FlexiFuel Turnier					
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

2011/01 -	MUDA	1.6	117 - 120	<p>Anti-block system ESP V6.0</p> <p>Heating / Air conditioner Automatic A/C V6.0</p> <p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor <ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature <ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
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				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD					
Focus '11 [DYA, DYB] Turnier - Focus 1.0 EcoBoost Turnier					
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front

					<ul style="list-style-type: none"> - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
2012/02 -	M1DA	1.0	125	Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay

					<ul style="list-style-type: none"> - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light

FORD					Focus '11 [DYA, DYB] Turnier - Focus 1.6 TDCi EConetic Turnier	
Year	Engine	Liters	HP	System	Functions	
					• Identification	

<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level

-	NGD...	1.6	105	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp

- Door locking, indication light
- ABS warning light

FORD					Focus '11 [DYA, DYB] Turnier - Focus 2.0 EcoBoost ST Turnier	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side 	
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor 	
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 	

2012/06 -	R9DA	2.0	250	<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				<p>Underbody/Steering Electro-hydraulic power steering V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				<p>Parking assisting system Park Distance Control V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
				<p>Instrument cluster Instrument cluster V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light

					<ul style="list-style-type: none"> - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
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FORD Focus '11 [DYA, DYB] Turnier - Focus 2.0 GDI Ti-VCT Turnier

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left

2011/09 -	XQDA	2.0	150	Automatic A/C V6.0	<ul style="list-style-type: none"> - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
				Underbody/Steering Electro-hydraulic power steering V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - Engine revolution - Steering wheel rotation angle - Number of actual errors - Current mileage
				Parking assisting system Park Distance Control V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				Instrument cluster Instrument cluster V6.0	<ul style="list-style-type: none"> • Current values - Driving speed adjustment lamp - Exhausted gases signal lamp - Preliminary preheating control lamp - Fuel reserve, control light - Oil pressure signal lamp - Generator lamp - Seat belt control light - Brakes control light - ASR/ESP control light - Hi-beam lights, control light - Fog light control lamp - Rear fog lights control lamp - Right direction indicator control light - Left direction indicator control light - Red warning lamp - Yellow warning lamp - Door locking, indication light - ABS warning light
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FORD						Focus C-MAX '04 [DM2] - Focus C-MAX 1.6					
Year	Engine	Liters	HP	System	Functions						
2003/09 - 2007/03	HWD...	1.6	100	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 						

FORD						Focus C-MAX '04 [DM2] - Focus C-MAX 1.8					
Year	Engine	Liters	HP	System	Functions						
2003/06 - 2004/05	CSDA	1.8	120	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 						

2004/04 - 2007/03	QQD...	1.8	122 - 125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD Focus C-MAX '04 [DM2] - Focus C-MAX 1.6 TDCi					
Year	Engine	Liters	HP	System	Functions
2003/06 - 2007/03	G8D...	1.6	109	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2004/11 - 2007/03	HHD...	1.6	90	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus C-MAX '04 [DM2] - Focus C-MAX 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification

2003/06 - 2007/03	G6D...	2.0	133 - 136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD **Focus C-MAX '04 [DM2] - Focus C-MAX 2.0**

Year	Engine	Liters	HP	System	Functions
2004/04 - 2007/03	AOD...	2.0	145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD **Focus C-MAX '04 [DM2] - Focus C-MAX 1.6 Ti-VCT**

Year	Engine	Liters	HP	System	Functions
2004/07 - 2007/03	HXDA	1.6	116	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus C-MAX '04 [DM2] - Focus C-MAX 1.8 TDCi					
Year	Engine	Liters	HP	System	Functions
2005/04 - 2007/03	KKDA	1.8	115	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus C-MAX '04 [DM2] - Focus C-MAX 1.8 FFV					
Year	Engine	Liters	HP	System	Functions
2005/05 - 2007/03	Q7DA	1.8	125	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Focus C-MAX '04 [DM2] - Focus C-MAX 2.0 CNG					
Year	Engine	Liters	HP	System	Functions
2005/11 - 2007/03	SYDA	2.0	126 - 145	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light

					<ul style="list-style-type: none"> - Alert sensor, front - Alert sensor, rear
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FORD Focus [Fase II] - Focus 1.6i 16V Flex

Year	Engine	Liters	HP	System	Functions
2010/01 -		1.6	109 - 116	Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature

FORD Focus [Fase II] - Focus Sedan 1.6i 16V Flex

Year	Engine	Liters	HP	System	Functions
2010/01 -		1.6	109 - 116	Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature

FORD Fusion - Fusion 1.6 Diesel Turbo 8V

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch

2007/07 -	F6JA-B	1.6	101	Central electronics Central electronics V5.0	<ul style="list-style-type: none"> - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
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FORD Fusion - Fusion 1.4 Diesel 8V					
Year	Engine	Liters	HP	System	Functions
2007/07 - 2009/12	F6JA-B	1.4	68	Central electronics Central electronics V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Collision signal - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Fog light switch - Wiper switch - Rear fog lights switch - Driver's door contact switch - Number of authorized remote controls - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch

FORD Galaxy '06 [WA6] - Galaxy 2.0					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal

2006/03	AOW...	2.0	146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
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FORD **Galaxy '06 [WA6] - Galaxy 1.8 TDCi**

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch
2006/03	FFWA	1.8	100		

2010/03					<ul style="list-style-type: none"> - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Galaxy '06 [WA6] - Galaxy 2.0 TDCi	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap 	

2006/03 - 2010/02	AZWA	2.0	131	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside

				<ul style="list-style-type: none"> - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch

2006/03 -	QXW...	2.0	140		<ul style="list-style-type: none"> - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left

2007/11 - 2012/12	KLWA	2.0	116		<ul style="list-style-type: none"> - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside

			Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay

2010/03 -	TXWA	2.0	163	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage

2008/09 - 2012/12	AZWC	2.0	136	<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Galaxy '06 [WA6] - Galaxy 2.3	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam 	

2007/09 -	SEWA	2.3	160	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status

- Combustion air blower
- Main ON time
- Supplem./auxiliary heater fuel pump

FORD					Galaxy '06 [WA6] - Galaxy 2.2 TDCi	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 	
2008/03 - 2010/10	Q4WA	2.2	175	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- 	

				<ul style="list-style-type: none"> - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal

2010/11 -	KNW...	2.2	200	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Current values - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
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FORD Galaxy '06 [WA6] - Galaxy 2.0 FlexiFuel

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay

-	TBW...	2.0	146		<ul style="list-style-type: none"> - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Galaxy '06 [WA6] - Galaxy 2.0 EcoBoost SCTi	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature 	

2010/03 -	TNW...	2.0	200 - 203	<ul style="list-style-type: none"> - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
			<p>Parking assisting system</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside

				Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD				Galaxy '06 [WA6] - Galaxy 1.6 EcoBoost	
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch

2010/11 -	JTW...	1.6	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

Year	Engine	Liters	HP	System	Functions
2011/02 -	T1W...	1.6	115	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay

					- Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
Kuga '08 [DM2] - Kuga 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions
2008/02 - 2012/11	G6DG	2.0	136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection

2010/05 - 2012/11	UKDA	2.0	136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD **Kuga '08 [DM2] - Kuga 2.0 TDCi 4x4**

Year	Engine	Liters	HP	System	Functions
2008/02 - 2012/11	G6DG	2.0	136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2010/04 - 2012/11	TXDA	2.0	163 - 167	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2010/05 - 2012/11	UKDA	2.0	136	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance

					<ul style="list-style-type: none"> - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD						Kuga '08 [DM2] - Kuga 2.5i 4x4					
Year	Engine	Liters	HP	System	Functions						
2008/12 - 2012/11	HYD...	2.5	200	Parking assisting system Park Distance Control M5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 						

FORD						Kuga '13 [DM2] - Kuga 2.0 TDCi					
Year	Engine	Liters	HP	System	Functions						
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side 						
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed 						

2012/11 -	UKMA	2.0	136		<ul style="list-style-type: none"> - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal

FORD					Kuga '13 [DM2] - Kuga 2.0 TDCi 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side 	

				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<p>Anti-block system ESP V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
2012/11	UKMA	2.0	136	<p>Heating / Air conditioner Automatic A/C V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics V6.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status

					<ul style="list-style-type: none"> - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal
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FORD **Kuga '13 [DM2] - Kuga 1.6 EcoBoost**

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
2012/11 -	JQM...	1.6	150		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps

				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal

FORD					
Kuga '13 [DM2] - Kuga 1.6 EcoBoost 4x4					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration

2012/11 -	JTMA	1.6	182	Anti-block system ESP V6.0	<ul style="list-style-type: none"> - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Heating / Air conditioner Automatic A/C V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Sunlight sensor test • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Fresh air fan control - Current position fresh air / ventilation flap - Sun sensor left - Sun sensor right - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - air conditioner - brake fluid level - Collision signal - Kilometer reading - Clutch pedal switch - Signal horn - Main beam relay - Hatchback status - Windscreen wiper relay - Emergency lights switch - Windscreen heating relay - Rear window defroster relay - Passenger side rear door status - Driver side front door status - Passenger side front door status - Driver side rear door status - Windshield washer relay - Number of authorized remote controls - Heated rear window button signal - Heated windshield button signal

FORD					Mondeo - Mondeo 2.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification 	

				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2007/11	CAF488Q2	2.0	146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch

					<ul style="list-style-type: none"> - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo - Mondeo 2.3i	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature 	

					<ul style="list-style-type: none"> - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2007/11	L3	2.3	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME-

					<ul style="list-style-type: none"> - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
Mondeo '07 [BD7] - Mondeo 2.0					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side

				Airbag Airbag G9.0	<ul style="list-style-type: none"> - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2007/02 -	AOB...	2.0	146	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
Mondeo '07 [BD7] - Mondeo 2.5					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side

<p>2007/02 - 2010/03</p>	<p>HU...</p>	<p>2.5</p>	<p>220</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance

					<ul style="list-style-type: none"> - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD	Mondeo '07 [BD7] - Mondeo 2.0 TDCi
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Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay

2007/02 - 2010/02	AZBA	2.0	131		<ul style="list-style-type: none"> - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
				<p>Heating / Air conditioner</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps

				Automatic A/C G9.0	<ul style="list-style-type: none"> - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2007/02	QXB...	2.0	140	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET-

				<ul style="list-style-type: none"> - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side

				Airbag Airbag G9.0	<ul style="list-style-type: none"> - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2007/11	KLBA	2.0	116	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection

			Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level

2010/03 -	TXBA	2.0	163	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
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FORD **Mondeo '07 [BD7] - Mondeo 2.3**

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp

2007/09 -	SEBA	2.3	160	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time

- Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BD7] - Mondeo 2.2 TDCi	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side 	
2008/03 -	Q4BA	2.2	175	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch 	

2010/11				<ul style="list-style-type: none"> - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistance, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left

					<ul style="list-style-type: none"> - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2010/11	KNB...	2.2	200	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON

					<ul style="list-style-type: none"> - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BD7] - Mondeo 1.8 TDCi	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values 	

2007/02 - 2010/11	QYBA	1.8	125	Airbag Airbag G9.0	<ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Current values - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BD7] - Mondeo 1.6 Ti-VCT	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side 	

2007/02 - 2010/08	PNBA	1.6	125	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> - Resistance pretensioner front passenger side - Resistance kneebag front driver's side <ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance

				<ul style="list-style-type: none"> - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading

2010/09 -	KGBA	1.6	120	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature

- Additional cooling fluid pump
- Glow plug
- Auxiliary/stationery heater status
- Combustion air blower
- Main ON time
- Supplem./auxiliary heater fuel pump

FORD **Mondeo '07 [BD7] - Mondeo 2.0 Flexifuel**

Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay

2008/02 -	TBB...	2.0	146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD

Mondeo '07 [BD7] - Mondeo 2.0 LPG

Year	Engine	Liters	HP	System	Functions
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2009/04 -	TBB...	2.0	141 - 146	<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay

					<ul style="list-style-type: none"> - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BD7] - Mondeo 2.0 EcoBoost SCTi	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature 	

					<ul style="list-style-type: none"> - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2010/03 -	TNB...	2.0	199 - 203	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF

				<ul style="list-style-type: none"> - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front

					<ul style="list-style-type: none"> - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2010/09	TPBA	2.0	240	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD				Mondeo '07 [BD7] - Mondeo 1.6 EcoBoost	
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

2010/11 -	JTB...	1.6	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
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FORD **Mondeo '07 [BD7] - Mondeo 1.6 TDCi**

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch

2011/02 -	T1B...	1.6	115	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
Mondeo '07 [BD7] - Mondeo 1.8 TDCi eco					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap

2007/02 - 2010/11	KHBA	1.8	125	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside

					<ul style="list-style-type: none"> - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			Additional heater Auxiliary/supplementary heater G9.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BD7] - Mondeo 2.0 TDCi eco	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side 	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage 	

2008/09 -	LPBA	2.0	116	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
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FORD	Mondeo '07 [BE7] - Mondeo 1.6 Ti-VCT
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Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn

2007/02 - 2010/08	RHBA	1.6	110	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower

					<ul style="list-style-type: none"> - Main ON time - Supplem./auxiliary heater fuel pump
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2010/09	KGBA	1.6	120	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch

					<ul style="list-style-type: none"> - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BE7] - Mondeo 2.0	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribtion flaps 	

				Automatic A/C G9.0	<ul style="list-style-type: none"> - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2007/02	AOB...	2.0	146	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET

					<ul style="list-style-type: none"> - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD				Mondeo '07 [BE7] - Mondeo 2.5	
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
					<ul style="list-style-type: none"> • Identification • Clear errors

2007/02 - 2010/03	HU...	2.5	220	Airbag Airbag G9.0	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
Mondeo '07 [BE7] - Mondeo 1.8 TDCi					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side

2007/02 - 2010/11	FFBA	1.8	100	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside

					<ul style="list-style-type: none"> - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BE7] - Mondeo 2.0 TDCi	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch 	

2007/02 - 2010/02	AZBA	2.0	131	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Current values - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2007/02	QXB...	2.0	140	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch

				<ul style="list-style-type: none"> - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Current values - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
<p>2007/11</p>	<p>KLBA</p>	<p>2.0</p>	<p>116</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

2010/03	TXBA	2.0	163	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Current values - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light

				<ul style="list-style-type: none"> - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp

2008/09	AZBC	2.0	136	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time

FORD				Mondeo '07 [BE7] - Mondeo 2.3	
Year	Engine	Liters	HP	System	Functions
2007/09 -	SEBA	2.3	160	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light

					<ul style="list-style-type: none"> - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BE7] - Mondeo 2.2 TDCi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values 	

2008/03 - 2010/11	Q4BA	2.2	175	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch

				<ul style="list-style-type: none"> - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

				Airbag Airbag G9.0	<ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2010/11 -	KNB...	2.2	200	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Current values - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
Mondeo '07 [BE7] - Mondeo 2.0 Flexifuel					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side

2008/02 -	TBB...	2.0	146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Resistance kneebag front driver's side • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance

					<ul style="list-style-type: none"> - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
Mondeo '07 [BE7] - Mondeo 2.0 LPG					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal

2009/04 -	TBB...	2.0	141 - 146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Current values - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
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FORD **Mondeo '07 [BE7] - Mondeo 2.0 EcoBoost SCTi**

Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp

2010/03 -	TNB...	2.0	199 - 203	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time

					- Supplem./auxiliary heater fuel pump
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2010/09 -	TPBA	2.0	240	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake

					<ul style="list-style-type: none"> - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BE7] - Mondeo 1.6 EcoBoost	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right 	

					<ul style="list-style-type: none"> - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2010/11 -	JTB...	1.6	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON

					<ul style="list-style-type: none"> - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD				Mondeo '07 [BE7] - Mondeo 1.6 TDCi	
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

				Airbag Airbag G9.0	<ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2011/02	T1B...	1.6	115	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Current values - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD						Mondeo '07 [BE7] - Mondeo 1.8 TDCi eco					
Year	Engine	Liters	HP	System	Functions						
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 						
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination 						

2007/02 - 2010/11	KHBA	1.8	125	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump

					<ul style="list-style-type: none"> - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
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FORD **Mondeo '07 [BE7] - Mondeo 2.0 TDCi eco**

Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch
2008/09 -	LPBA	2.0	116		

					<ul style="list-style-type: none"> - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BG7] Turnier - Mondeo 1.6 Ti-VCT Turnier	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 	

				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
<p>2007/02 - 2010/08</p>	<p>RHBA</p>	<p>1.6</p>	<p>110</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp

			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side

2010/09	KGBA	1.6	120	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance

					<ul style="list-style-type: none"> - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			Additional heater Auxiliary/supplementary heater G9.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD						Mondeo '07 [BG7] Turnier - Mondeo 2.0 Turnier					
Year	Engine	Liters	HP	System		Functions					
				Heating / Air conditioner Automatic A/C G9.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 					
				Airbag Airbag G9.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side 					
						<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination 					

2007/02	AOB...	2.0	146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
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FORD **Mondeo '07 [BG7] Turnier - Mondeo 2.5 Turnier**

Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay

2007/02 - 2010/03	HU...	2.5	220	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

Year	Engine	Liters	HP	System	Functions
2007/02 - 2010/11	FFBA	1.8	101	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch

					<ul style="list-style-type: none"> - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BG7] Turnier - Mondeo 2.0 TDCi Turnier	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage 	

				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
<p>2007/02 - 2010/02</p>	<p>AZBA</p>	<p>2.0</p>	<p>131</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage

			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake

2007/02 -	QXB...	2.0	140	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay

2007/11 -	KLBA	2.0	116	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
					<ul style="list-style-type: none"> • Identification • Clear errors

				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2010/03	TXBA	2.0	163	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal

				<ul style="list-style-type: none"> - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<ul style="list-style-type: none"> • Identification • Clear errors

				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
<p>2008/09 -</p>	<p>AZBC</p>	<p>2.0</p>	<p>136</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
Mondeo '07 [BG7] Turnier - Mondeo 2.3 Turnier					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side

					<ul style="list-style-type: none"> - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2007/09 -	SEBA	2.3	160	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside

					<ul style="list-style-type: none"> - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
Mondeo '07 [BG7] Turnier - Mondeo 2.2 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake

2008/03 - 2010/11	Q4BA	2.2	175	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay

2010/11 -	KNB...	2.2	200	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

Year	Engine	Liters	HP	System	Functions
2008/02 -	TBB...	2.0	146	Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch

					<ul style="list-style-type: none"> - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Mondeo '07 [BG7] Turnier - Mondeo 2.0 LPG Turnier	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature 	

				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2009/04 -	TBB...	2.0	141 - 146	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch

					<ul style="list-style-type: none"> - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
Mondeo '07 [BG7] Turnier - Mondeo 2.0 EcoBoost SCTi Turnier					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
					<ul style="list-style-type: none"> • Identification

				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
<p>2010/03 -</p>	<p>TNB...</p>	<p>2.0</p>	<p>199 - 203</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp

			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side

2010/09 -	TPBA	2.0	240	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance

					<ul style="list-style-type: none"> - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD **Mondeo '07 [BG7] Turnier - Mondeo 1.6 EcoBoost Turnier**

Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch

2010/11 -	JTB...	1.6	160	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature

				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
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FORD					
Mondeo '07 [BG7] Turnier - Mondeo 1.6 TDCi Turnier					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay

2011/02 -	T1B...	1.6	115	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME +
2007/02 - 2010/11	KHBA	1.8	125		

					<ul style="list-style-type: none"> - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
Mondeo '07 [BG7] Turnier - Mondeo 2.0 TDCi Turnier eco					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side

				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
<p>2008/09 -</p>	<p>LPBA</p>	<p>2.0</p>	<p>116</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					S-MAX '06 - S-MAX 2.3i	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side 	
					<ul style="list-style-type: none"> • Identification 	

2007/03 -	Duratec- HE/L3	2.3	160	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch

					<ul style="list-style-type: none"> - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD	S-MAX '06 [WA6] - S-MAX 2.0 TDCi
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Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch

2006/03 - 2010/02	AZWA	2.0	131		<ul style="list-style-type: none"> - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left

					<ul style="list-style-type: none"> - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2006/03	QXW...	2.0	140	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON

				<ul style="list-style-type: none"> - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
			<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Airbag</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side

2007/09 - 2012/12	KLWA	2.0	116	Airbag G9.0	<ul style="list-style-type: none"> - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside

			Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal

2010/03 -	TXWA	2.0	163	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

			<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay

2008/09 - 2012/12	AZWC	2.0	136	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD

S-MAX '06 [WA6] - S-MAX 2.0

Year	Engine	Liters	HP	System	Functions
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				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2006/03	AOW...	2.0	146	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake

					<ul style="list-style-type: none"> - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					S-MAX '06 [WA6] - S-MAX 2.5	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right 	

2006/03 - 2010/03	HUWA	2.5	220	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature <ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp <ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside
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				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
S-MAX '06 [WA6] - S-MAX 1.8 TDCi					
Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay

2006/03 - 2010/03	QYWA	1.8	125	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
					<ul style="list-style-type: none"> • Identification

2007/01 - 2010/03	FFWA	1.8	101	<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification

				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					S-MAX '06 [WA6] - S-MAX 2.3	
Year	Engine	Liters	HP	System	Functions	
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature 	
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side 	

					<ul style="list-style-type: none"> - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2007/09 -	SEWA	2.3	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside

					<ul style="list-style-type: none"> - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
S-MAX '06 [WA6] - S-MAX 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch

2008/03 - 2010/10	Q4WA	2.2	175	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
					<ul style="list-style-type: none"> • Identification • Clear errors

				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2010/11	KNW...	2.2	200	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal

					<ul style="list-style-type: none"> - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					S-MAX '06 [WA6] - S-MAX 2.0 FlexiFuel	
Year	Engine	Liters	HP	System	Functions	
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature 	

					<ul style="list-style-type: none"> - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
2008/03	TBW...	2.0	146	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME-

					<ul style="list-style-type: none"> - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					
S-MAX '06 [WA6] - S-MAX 2.0 EcoBoost SCTi					
Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side

				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
<p>2010/03 -</p>	<p>TNW...</p>	<p>2.0</p>	<p>200 - 203</p>	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear

			Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
			Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
			Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
			Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage

2010/09 -	TPWA	2.0	240	<p>Central electronics Central electronics G9.0</p>	<ul style="list-style-type: none"> - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				<p>Parking assisting system Park Distance Control G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

				<p>Additional heater Auxiliary/supplementary heater G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
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FORD	S-MAX '06 [WA6] - S-MAX 1.6 EcoBoost
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Year	Engine	Liters	HP	System	Functions
				<p>Heating / Air conditioner Automatic A/C G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				<p>Airbag Airbag G9.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch

2010/11 -	JTW...	1.6	160	Central electronics Central electronics G9.0	<ul style="list-style-type: none"> - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug

					<ul style="list-style-type: none"> - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump
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FORD	S-MAX '06 [WA6] - S-MAX 1.6 TDCi
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Year	Engine	Liters	HP	System	Functions
				Heating / Air conditioner Automatic A/C G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Actual position, air distribution flaps - Current position air mix flap left - Current position air mix flap right - Air conditioner evaporator temperature - Current position fresh air / ventilation flap - Center left vent temperature - Center right vent temperature - Left footwell vent temperature - Right footwell vent temperature
				Airbag Airbag G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Resistance Front airbag driver side - Resistance Front airbag front passenger side - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance kneebag front driver's side
				Central electronics	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Parking brake - Battery voltage - brake fluid level - Collision signal - Instrument panel illumination - Top contact switch - Brake pedal switch - Light switch - Kilometer reading - Intensity of instrument illumination - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Indicators switch - Emergency lights switch - Front fog lights relay - Rear fog light relay

2011/02 -	T1W...	1.6	115	Central electronics G9.0	<ul style="list-style-type: none"> - Windscreen heating relay - Rear window defroster relay - Windscreen washer system switch - Rear window heater, control light - Fog light switch - Wiper switch - Rear fog lights switch - Backup lights - Electrical parking brake - Windshield washer relay - Driver's door contact switch - Heated rear window button signal - Heated windshield button signal - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - Cruise control, button SET - Cruise control button SET- - Cruise control button ON - Cruise control button OFF - Cruise control button RES - Cruise control button TIME- - Cruise control, button TIME + - Cruise control button CAN - Indicator/hazard warning lights relay - Heated windshield indicator lamp
				Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
				Additional heater Auxiliary/supplementary heater G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Passenger compartment temperature - The ambient temperature - Additional cooling fluid pump - Glow plug - Auxiliary/stationery heater status - Combustion air blower - Main ON time - Supplem./auxiliary heater fuel pump

FORD					Transit - Transit 2.8D	
Year	Engine	Liters	HP	System	Functions	

2006/08 -	JX493ZLQ	2.8	116	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD					Transit '06 - Transit FT 300 2.2 TDCi	
Year	Engine	Liters	HP	System	Functions	
2006/04 - 2011/09	P8F...	2.2	85	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 	
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 	

2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2006/04 - 2007/08	QWF...	2.2	131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD

Transit '06 - Transit FT 330 2.3i

Year	Engine	Liters	HP	System	Functions
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2006/04 - 2011/09	GZF...	2.3	145	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD					
Transit '06 - Transit FT 260 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2006/04 - 2007/08	QWF...	2.2	130 - 131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

2006/04 - 2011/09	P8F...	2.2	85	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD

Transit '06 - Transit FT 330 2.4 TDCi

Year	Engine	Liters	HP	System	Functions
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2006/07 - 2011/09	PHF...	2.4	100 - 101	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD					
Transit '06 - Transit FT 350 3.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2007/08 - 2011/09	SAF...	3.2	200	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Transit '06 - Transit FT 330 2.3i CNG					
Year	Engine	Liters	HP	System	Functions
2006/04 - 2011/09	GZFC	2.3	136 - 146	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance

					<ul style="list-style-type: none"> - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD						Transit '06 - Transit FT 330 2.4 TDCi 4x4					
Year	Engine	Liters	HP	System	Functions						
2007/09 - 2011/09	H9F...	2.4	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 						

FORD						Transit '06 - Transit FT 280 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions						
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 						
2006/04 - 2011/09	P8F...	2.2	85	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside 						

					<ul style="list-style-type: none"> - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2006/04 - 2007/08	QWF...	2.2	130 - 131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance

- Parking assistance, switch
- Parking assistant, control light
- Alert sensor, front
- Alert sensor, rear

FORD					Transit '06 - Transit FT 330 2.2 TDCi	
Year	Engine	Liters	HP	System	Functions	
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 	
2006/04 - 2007/08	QWF...	2.2	131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 	
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch 	

					<ul style="list-style-type: none"> - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Transit '06 - Transit FT 350 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2006/04 - 2007/08	QWF...	2.2	131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch

					<ul style="list-style-type: none"> - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Transit '06 - Transit FT 330 2.3i LPG					
Year	Engine	Liters	HP	System	Functions
2006/04 - 2011/09	GZFC	2.3	146	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch

					<ul style="list-style-type: none"> - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD Transit '06 - Transit FT 350 2.3i					
Year	Engine	Liters	HP	System	Functions
2006/04 - 2011/09	GZF...	2.3	145	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Transit '06 - Transit FT 350 2.3i CNG					
Year	Engine	Liters	HP	System	Functions
2006/04 - 2011/09	GZFC	2.3	136 - 146	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Transit '06 - Transit FT 350 2.3i LPG					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection

2006/04 - 2011/09	GZFC	2.3	146	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD					
Transit '06 - Transit FT 350 2.4 TDCi					
Year	Engine	Liters	HP	System	Functions
2006/07 - 2011/09	PHF...	2.4	100 - 101	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Transit '06 - Transit FT 430 2.4 TDCi					
Year	Engine	Liters	HP	System	Functions
2006/07 - 2011/09	PHF...	2.4	100 - 101	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Transit '06 - Transit FT 300 2.4 TDCi					
Year	Engine	Liters	HP	System	Functions
2006/07 - 2011/09	PHF...	2.4	100 - 101	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Transit '06 - Transit FT 460 2.4 TDCi					
Year	Engine	Liters	HP	System	Functions
2006/07 - 2011/09	H9F...	2.4	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Transit '06 - Transit FT 350 2.4 TDCi 4x4					
Year	Engine	Liters	HP	System	Functions
2007/09 - 2011/09	H9F...	2.4	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status

					<ul style="list-style-type: none"> - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD Transit '06 - Transit FT 460 3.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2007/08 - 2011/09	SAF...	3.2	200	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Transit '06 - Transit FT 300 2.3i					
Year	Engine	Liters	HP	System	Functions
2006/04 - 2011/09	GZF...	2.3	146	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Transit '12 - Transit FT 250 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors

2011/09 -	DRF...	2.2	100	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD					
Transit '12 - Transit FT 260 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	DRF...	2.2	100	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Transit '12 - Transit FT 280 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	CYF...	2.2	125	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light

					<ul style="list-style-type: none"> - Alert sensor, front - Alert sensor, rear
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FORD Transit '12 - Transit FT 300 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	DRF...	2.2	100	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Transit '12 - Transit FT 330 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	DRF...	2.2	100	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD Transit '12 - Transit FT 350 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside

2011/09 -	CYF...	2.2	125	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD					
Transit '12 - Transit FT 350 2.2 TDCi HDT					
Year	Engine	Liters	HP	System	Functions
2011/09 -	USR...	2.2	135	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Transit '12 - Transit FT 370 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	DRR...	2.2	100	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Transit '12 - Transit FT 430 2.2 TDCi					

Year	Engine	Liters	HP	System	Functions
2011/09 -	CVR...	2.2	155	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Transit '12 - Transit FT 430 2.2 TDCi HDT					
Year	Engine	Liters	HP	System	Functions
2011/09 -	USR...	2.2	135	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Transit '12 - Transit FT 460 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	CVR...	2.2	155	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance

					<ul style="list-style-type: none"> - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD						Transit '12 - Transit FT 460 2.2 TDCi HDT					
Year	Engine	Liters	HP	System		Functions					
2011/09 -	USR...	2.2	135	Parking assisting system Park Distance Control G9.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 					

FORD						Transit Euroline '06 - Transit Euroline 2.2 TDCi					
Year	Engine	Liters	HP	System		Functions					
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear 					
2006/04			130			<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside 					

- 2007/08	QWF...	2.2	- 131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					Transit Euroline '12 - Transit Euroline 2.2 TDCi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside 	

2011/09 -	CYFB	2.2	125	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD **Transit Nugget '06 - Transit Nugget 2.2 TDCi**

Year	Engine	Liters	HP	System	Functions
2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2006/04 - 2007/08	QWF...	2.2	130 - 131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside

2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2008/10 - 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Transit Nugget '12 - Transit Nugget 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	CYFB	2.2	125	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

FORD					
Transit Tourneo '06 - Transit Tourneo 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

2006/04 - 2010/06	QVFA	2.2	110	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2006/04 - 2007/08	QWF...	2.2	130 - 131	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2007/10 - 2011/09	PGF...	2.2	140	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
2008/10					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside

- 2011/09	SRF...	2.2	115	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear
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FORD					
Transit Tourneo '12 - Transit Tourneo 2.2 TDCi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	CYF...	2.2	125	Parking assisting system Park Distance Control G9.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Parking assistance, switch - Parking assistant, control light - Alert sensor, front - Alert sensor, rear

[Accent \[RB\] - Accent 1.6 GDi](#)
[Accent blue \[RB\] - Accent blue 1.6 CRDi](#)
[Accent blue \[RB\] - Accent blue 1.4](#)
[Avante HD - Avante HD 2.0i](#)
[Avante HD - Avante HD 1.6 VGT CRDi](#)
[Avante XD - Avante XD 2.0i CVVT](#)
[Coupe \[GK\] - Coupe 2.0i](#)
[Elantra Station Wagon - Elantra 2.0 Station Wagon](#)
[Elantra \[HD\] - Elantra 2.0](#)
[Elantra \[HD\] - Elantra 1.6 CRDi](#)
[Elantra \[XD\] - Elantra 2.0 CRDi](#)
[Elantra \[XD\] Hatchback - Elantra 2.0 16V Hatchback](#)
[Elantra \[XD\] Hatchback - Elantra 2.0 CRDi Hatchback](#)
[Genesis - Genesis 3.8i](#)
[Genesis - Genesis 3.3i](#)
[Genesis - Genesis 4.6i](#)
[Genesis \[BH\] - Genesis 3.8](#)
[Genesis \[BK\] Coupe - Genesis 3.8 Coupe](#)
[Genesis \[BK\] Coupe - Genesis 2.0 T Coupe](#)
[Genesis \[BK\] Coupe - Genesis Coupe 2.0i](#)
[Grandeur HG - Grandeur HG 2.4 GDi](#)
[Grandeur HG - Grandeur HG 3.0 GDi](#)
[Grandeur TG - Grandeur TG 2.4i](#)
[Santa Fe New - Santa Fe New 2.2 VGT CRDi](#)
[Santa Fe \[CM\] - Santa Fe 2.2 CRDi 4x4](#)
[Santa Fe \[CM\] - Santa Fe 2.2 CRDi](#)
[Santa Fe \[CM\] - Santa Fe 2.7i 4x4](#)
[Santa Fe \[CM\] - Santa Fe 2.7i](#)
[Santa Fe \[CM\] - Santa Fe 2.4i](#)
[Santa Fe \[CM\] - Santa Fe 2.4i 4x4](#)
[Santa Fe \[CM\] - Santa Fe 2.0 CRDi](#)
[Santa Fe \[CM\] - Santa Fe 2.0 CRDi 4x4](#)
[Santa Fe \[CM\] - Santa Fe 3.5i 24V](#)
[Santa Fe \[CM\] - Santa Fe 3.5i 24V 4x4](#)
[Solaris \[RB\] - Solaris 1.4](#)
[Solaris \[RB\] - Solaris 1.6](#)
[Solaris \[RB\] Hatchback - Solaris 1.4 Hatchback](#)
[Solaris \[RB\] Hatchback - Solaris 1.6 Hatchback](#)
[Sonata \[NF\] - Sonata 2.0 CRDi](#)
[Sonata \[NF\] - Sonata 2.0 VGT CRDi](#)
[Sonata \[NF\] - Sonata 2.0 LPI](#)
[Sonata \[NF\] - Sonata 2.4i](#)
[Sonata \[NF\] - Sonata 2.0i](#)
[Sonata \[YF\] - Sonata 2.0](#)
[Sonata \[YF\] - Sonata 2.4 GDI](#)
[Sonata \[YF\] - Sonata 2.0 LPI](#)

[Tiburon \[GK, GS\] - Tiburon 2.0](#)
[Tucson - Tucson 2.0 VGT CRDi](#)
[Tucson \[JM\] - Tucson 2.0i](#)
[Tuscani - Tuscani 2.0i](#)
[Veracruz - Veracruz 3.0 V6 CRDi-VGT](#)
[Veracruz - Veracruz 3.8](#)
[Veracruz - Veracruz 3.8 4x4](#)
[Verna - Verna 1.4i](#)
[Verna - Verna 1.4D](#)
[Verna - Verna 1.6D](#)
[Verna - Verna 1.3i 8V](#)
[Verna - Verna 1.5i 8V](#)
[Verna - Verna 1.5i 16V](#)
[Verna - Verna 1.5 VGT](#)
[Verna - Verna 1.6i VVT](#)
[Verna New - Verna New 1.3i](#)
[Verna New - Verna New 1.5i](#)
[i30 \[FD, FDH\] - i30 1.4](#)
[i30 \[FD, FDH\] - i30 1.6](#)
[i30 \[FD, FDH\] - i30 2.0](#)
[i30 \[FD, FDH\] - i30 1.6 CRDi](#)
[i30 \[FD, FDH\] - i30 2.0 CRDi](#)
[i30 \[FD, FDH\] - i30 1.4 LPG](#)
[i30 \[FD, FDH\] - i30 1.6 LPG](#)
[i30 \[FD, FDH\] - i30 2.0 LPG](#)
[i30 \[FD, FDH\] CW - i30 1.6 CW](#)
[i30 \[FD, FDH\] CW - i30 2.0 CW](#)
[i30 \[FD, FDH\] CW - i30 1.6 CRDi CW](#)
[i30 \[FD, FDH\] CW - i30 2.0 CRDi CW](#)
[i30 \[FD, FDH\] CW - i30 1.4 CW](#)
[i30 \[FD, FDH\] CW - i30 1.4 LPG CW](#)
[i30 \[FD, FDH\] CW - i30 1.6 LPG CW](#)
[i30 \[FD, FDH\] CW - i30 2.0 LPG CW](#)
[ix35 \[EL\] - ix35 2.0](#)
[ix35 \[EL\] - ix35 2.0 4x4](#)
[ix55 \[EN\] - ix55 3.0 CRDi 4x4](#)

HYUNDAI					Accent [RB] - Accent 1.6 GDi	
Year	Engine	Liters	HP	System	Functions	
2011/01 -	G4FD	1.6	140	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure control solenoid valve A - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D 	

HYUNDAI					Accent blue [RB] - Accent blue 1.6 CRDi	
Year	Engine	Liters	HP	System	Functions	
2011/01 -	D4FB	1.6	128	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure control solenoid valve A 	

					<ul style="list-style-type: none"> - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D
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HYUNDAI Accent blue [RB] - Accent blue 1.4

Year	Engine	Liters	HP	System	Functions
2011/01 -	G4FA	1.4	109	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure control solenoid valve A - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D

HYUNDAI Avante HD - Avante HD 2.0i

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement

2006/04 -	Beta II	2.0	143	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					Avante HD - Avante HD 1.6 VGT CRDI	
Year	Engine	Liters	HP	System	Functions	
2006/06 -		1.6	159	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 	

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					Avante XD - Avante XD 2.0i CVVT	
Year	Engine	Liters	HP	System	Functions	
2000/04 - 2003/05		2.0	143	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve 	

Year	Engine	Liters	HP	System	Functions
2001/10 - 2009/08	G4GC...	2.0	137 - 143	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3

HYUNDAI Elantra Station Wagon - Elantra 2.0 Station Wagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control

2008/09 -	G4GF Beta II	2.0	139	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					Elantra [HD] - Elantra 2.0	
Year	Engine	Liters	HP	System	Functions	
2005/09 -	G4GF Beta II	2.0	139	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear 	

					<ul style="list-style-type: none"> - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI Elantra [HD] - Elantra 1.6 CRDi

Year	Engine	Liters	HP	System	Functions
2006/08 - 2011/06	D4FB	1.6	116	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1

- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3

HYUNDAI					Elantra [XD] - Elantra 2.0 CRDi	
Year	Engine	Liters	HP	System	Functions	
2001/06 - 2006/08	D4EA	2.0	113	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 	

HYUNDAI					Elantra [XD] Hatchback - Elantra 2.0 16V Hatchback	
Year	Engine	Liters	HP	System	Functions	
2000/06 - 2006/09	G4GC...	2.0	139 - 143	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve 	

HYUNDAI					Elantra [XD] Hatchback - Elantra 2.0 CRDi Hatchback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio 	

2001/06 - 2006/08	D4EA	2.0	113	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI				Genesis - Genesis 3.8i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Switch idle mode - Engine revolution - switch, brakes - solenoid valve relay - gear box oil temperature - transmission ratio - Transmission - Gearbox input speed - MIL-Status - Gas pedal position sensor (%) - Transmission output speed - Sport switch - Air conditioner switch - Automatic transmission power supply - Engine torque

2008/01 -		3.8	262	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> - Gearshift solenoid 1 - Gearshift solenoid 2 - Selector lever position - Gearshift solenoid 3 - Sportronic switch upshift - Sportronic switch downshift - Operating switch speed - Dry-running operation function - Slip rotation speed torque converter bridging - Gearshift solenoid 4 - Solenoid shift valve SLT pressure - Solenoid shift valve SLC 1 current - Solenoid shift valve SLC 2 current - Solenoid shift valve SLU current - MIL requested by fault code - Shift lock solenoid valve - Feedback solenoid valve 1 - Feedback solenoid valve 2 - Feedback solenoid valve 3 - Feedback solenoid valve 4 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1 - Solenoid valve 2 - Solenoid valve 3 - Solenoid valve 4 - solenoid valve relay - Throttle linear solenoid, sw. solenoid valve - Switch solenoid valve SLU - Solenoid shift valve SLC 1 - Solenoid shift valve SLC 2
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HYUNDAI				Genesis - Genesis 3.3i	
Year	Engine	Liters	HP	System	Functions
2008/01 -		3.3	290	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Switch idle mode - Engine revolution - switch, brakes - solenoid valve relay - gear box oil temperature - transmission ratio - Transmission - Gearbox input speed - MIL-Status - Gas pedal position sensor (%) - Transmission output speed - Sport switch - Air conditioner switch - Automatic transmission power supply - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Selector lever position - Gearshift solenoid 3 - Sportronic switch upshift - Sportronic switch downshift - Operating switch speed - Dry-running operation function - Slip rotation speed torque converter bridging

					<ul style="list-style-type: none"> - Gearshift solenoid 4 - Solenoid shift valve SLT pressure - Solenoid shift valve SLC 1 current - Solenoid shift valve SLC 2 current - Solenoid shift valve SLU current - MIL requested by fault code - Shift lock solenoid valve - Feedback solenoid valve 1 - Feedback solenoid valve 2 - Feedback solenoid valve 3 - Feedback solenoid valve 4 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1 - Solenoid valve 2 - Solenoid valve 3 - Solenoid valve 4 - solenoid valve relay - Throttle linear solenoid, sw. solenoid valve - Switch solenoid valve SLU - Solenoid shift valve SLC 1 - Solenoid shift valve SLC 2
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HYUNDAI				Genesis - Genesis 4.6i	
Year	Engine	Liters	HP	System	Functions
2008/09 -		4.6	380	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Switch idle mode - Engine revolution - switch, brakes - solenoid valve relay - gear box oil temperature - transmission ratio - Transmission - Gearbox input speed - MIL-Status - Gas pedal position sensor (%) - Transmission output speed - Sport switch - Air conditioner switch - Automatic transmission power supply - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Selector lever position - Gearshift solenoid 3 - Sportronic switch upshift - Sportronic switch downshift - Operating switch speed - Dry-running operation function - Slip rotation speed torque converter bridging - Gearshift solenoid 4 - Solenoid shift valve SLT pressure - Solenoid shift valve SLC 1 current - Solenoid shift valve SLC 2 current - Solenoid shift valve SLU current - MIL requested by fault code - Shift lock solenoid valve - Feedback solenoid valve 1 - Feedback solenoid valve 2

					<ul style="list-style-type: none"> - Feedback solenoid valve 3 - Feedback solenoid valve 4 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1 - Solenoid valve 2 - Solenoid valve 3 - Solenoid valve 4 - solenoid valve relay - Throttle linear solenoid, sw. solenoid valve - Switch solenoid valve SLU - Solenoid shift valve SLC 1 - Solenoid shift valve SLC 2
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HYUNDAI	Genesis [BH] - Genesis 3.8
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Year	Engine	Liters	HP	System	Functions
2008/05 -		3.8	290	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Switch idle mode - Engine revolution - switch, brakes - solenoid valve relay - gear box oil temperature - transmission ratio - Transmission - Gearbox input speed - MIL-Status - Gas pedal position sensor (%) - Transmission output speed - Sport switch - Air conditioner switch - Automatic transmission power supply - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Selector lever position - Gearshift solenoid 3 - Sportronic switch upshift - Sportronic switch downshift - Operating switch speed - Dry-running operation function - Slip rotation speed torque converter bridging - Gearshift solenoid 4 - Solenoid shift valve SLT pressure - Solenoid shift valve SLC 1 current - Solenoid shift valve SLC 2 current - Solenoid shift valve SLU current - MIL requested by fault code - Shift lock solenoid valve - Feedback solenoid valve 1 - Feedback solenoid valve 2 - Feedback solenoid valve 3 - Feedback solenoid valve 4 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1 - Solenoid valve 2 - Solenoid valve 3 - Solenoid valve 4 - solenoid valve relay - Throttle linear solenoid, sw. solenoid valve

- Switch solenoid valve SLU
- Solenoid shift valve SLC 1
- Solenoid shift valve SLC 2

HYUNDAI					Genesis [BK] Coupe - Genesis 3.8 Coupe	
Year	Engine	Liters	HP	System	Functions	
2010/09 -	G6DA	3.8	303	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Switch idle mode - Engine revolution - switch, brakes - solenoid valve relay - gear box oil temperature - transmission ratio - Transmission - Gearbox input speed - MIL-Status - Gas pedal position sensor (%) - Transmission output speed - Sport switch - Air conditioner switch - Automatic transmission power supply - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Selector lever position - Gearshift solenoid 3 - Sportronic switch upshift - Sportronic switch downshift - Operating switch speed - Dry-running operation function - Slip rotation speed torque converter bridging - Gearshift solenoid 4 - Solenoid shift valve SLT pressure - Solenoid shift valve SLC 1 current - Solenoid shift valve SLC 2 current - Solenoid shift valve SLU current - MIL requested by fault code - Shift lock solenoid valve - Feedback solenoid valve 1 - Feedback solenoid valve 2 - Feedback solenoid valve 3 - Feedback solenoid valve 4 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1 - Solenoid valve 2 - Solenoid valve 3 - Solenoid valve 4 - solenoid valve relay - Throttle linear solenoid, sw. solenoid valve - Switch solenoid valve SLU - Solenoid shift valve SLC 1 - Solenoid shift valve SLC 2 	

HYUNDAI					Genesis [BK] Coupe - Genesis 2.0 T Coupe	
Year	Engine	Liters	HP	System	Functions	

2010/09 -	G4KF	2.0	214	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Switch idle mode - Engine revolution - switch, brakes - solenoid valve relay - gear box oil temperature - transmission ratio - Transmission - Gearbox input speed - MIL-Status - Gas pedal position sensor (%) - Transmission output speed - Sport switch - Air conditioner switch - Automatic transmission power supply - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Selector lever position - Gearshift solenoid 3 - Sportronic switch upshift - Sportronic switch downshift - Operating switch speed - Dry-running operation function - Slip rotation speed torque converter bridging - Gearshift solenoid 4 - Solenoid shift valve SLT pressure - Solenoid shift valve SLC 1 current - Solenoid shift valve SLC 2 current - Solenoid shift valve SLU current - MIL requested by fault code - Shift lock solenoid valve - Feedback solenoid valve 1 - Feedback solenoid valve 2 - Feedback solenoid valve 3 - Feedback solenoid valve 4 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1 - Solenoid valve 2 - Solenoid valve 3 - Solenoid valve 4 - solenoid valve relay - Throttle linear solenoid, sw. solenoid valve - Switch solenoid valve SLU - Solenoid shift valve SLC 1 - Solenoid shift valve SLC 2
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HYUNDAI					Genesis [BK] Coupe - Genesis Coupe 2.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position (bank 2) - Voltage, throttle valve position sensor - Vehicle driving speed 	

- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status

2008/10

Theta 2.0

2.0

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Engine control
Theta 2.0

- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3

- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- **Actuators**
 - Fuel pump relay
 - Signal lamp for representing defect, engine control
 - Engine for reg. throttle valve
 - Injector (cylinder 1)
 - Injector (cylinder 2)
 - Injector (cylinder 4)
 - Injector (cylinder 4)
 - solenoid A turbo pressure restriction
 - fuel tank evaporation/regeneration valve
 - Main relay
 - air conditioner compressor relay
 - Exhaust camsh.control sol. valve
 - Intake camshaft control, solenoid valve
 - Switchable intake manifold, solenoid valve
 - Lambda probe heating (B1, S1)
 - Lambda probe heating (B1, S2)
 - Immobilizer, warning light
 - Ignition coil Cylinder 1
 - Ignition coil Cylinder 2

					<ul style="list-style-type: none"> - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
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HYUNDAI	Grandeur HG - Grandeur HG 2.4 GDI
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Year	Engine	Liters	HP	System	Functions
				Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure control solenoid valve A - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Evaporative emissions control system • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Reset all adaptation values • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Coolant temperature sensor voltage - Contact switch - Fuel pump relay - Coolant temperature - Pulse-duty factor, fuel tank ventilation valve - Engine revolution - engine loading - stop lights switch - intake manifold pressure - recommended idle revolutions - Immobilizer - Servo steering wheel pressure sensor

2011/02
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Theta II 2.4
GDI

2.4

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Engine control

- system power supply
- Main relay
- injected quantity adj. resistor
- engine oil temperature
- Lambda compensation
- Ambient temperature sensor
- Rail pressure, nominal
- Rail pressure, actual
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Gas pedal position sensor (%)
- Fuel level in the tank
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Ignition angle Cylinder 2
- Ignition angle Cylinder 3
- Ignition angle Cylinder 4
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), resultant value
- Lambda target value
- Lambda actual value
- Cruise control, control light
- System in fail safe
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Cruise control indicator lamp SET
- Catalytic converter heating status
- Brake test switch
- Cooling agent pressure
- Metered engine oil temperature
- Fuel pressure sensor voltage
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Fuel level gauge

Theta 2.0 GDI

- Torque converter-slip speed
- Fuel pressure control valve
- Knock sensor test
- Minimum operating voltage
- A/C compressor status
- Noise/vibration reduction
- Overtemperature protection
- Fuel pressure control difference
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
 - Knock detonation, offset adjustment adaption, cylinder 2
 - Knock detonation, offset adjustment adaption, cylinder 3
 - Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Fuel pressure regulator opening angle
- Fuel pressure regulator closing angle
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel tank pressure control valve
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Status speed control
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Coolant temp. at engine start
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- Injection time cylinder 1 (homogeneous)
- Injection time cylinder 2 (homogeneous)
- Injection time cylinder 3 (homogeneous)
- Injection time cylinder 4 (homogeneous)
- Injection time cylinder 1 (stratified charge)
- Injection time cylinder 2 (stratified charge)
- Injection time cylinder 3 (stratified charge)
- Injection time cylinder 4 (stratified charge)
- **Actuators**
 - Fuel pump relay
 - Signal lamp for representing defect, engine control
 - Engine for reg. throttle valve
 - Injector (cylinder 1)

					<ul style="list-style-type: none"> - Injector (cylinder 2) - Injector (cylinder 4) - Injector (cylinder 4) - fuel tank evaporation/regeneration valve - Main relay - Exhaust camsh.control sol. valve - Intake camshaft control, solenoid valve - Switchable intake manifold, solenoid valve - Lambda probe heating (B1, S1) - Lambda probe heating (B1, S2) - Speed control light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Fuel evaporation shutoff valve - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Fuel pressure regulation - Cruise control indicator lamp SET
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HYUNDAI					Grandeur HG - Grandeur HG 3.0 GDi	
Year	Engine	Liters	HP	System	Functions	
2011/02 -	Lambda II 3.0 GDI	3.0	271	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure control solenoid valve A - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D 	

HYUNDAI					Grandeur TG - Grandeur TG 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset 	

- **Error memory**

- **Current values**

- Throttle valve position (bank 2)
- Voltage, throttle valve position sensor
- Vehicle driving speed
- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3

2007/02	Theta II 2.4	2.4	180	Engine control Theta 2.0	<ul style="list-style-type: none"> - Injection time, cylinder 4 - Engine operation detected - Cooling agent pressure sensor - intake manifold pressure sensor - MIL-Status - Coolant temperature sensor, primary - Coolant temperature sensor, secondary - Gas pedal position sensor (%) - Fuel level in the tank - Throttle valves servo motor control - Throttle valve servo motor position - Cooling agent temperature motor - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Ignition angle Cylinder 1 - Camshaft intake valves (bank 1), resultant value - Camshaft exhaust valves (bank 1), actual value - Camshaft exhaust valves (bank 1), resultant value - Outdoor temperature sensor voltage - Transmission, specified torque - Lambda target value - Lambda actual value - harmful for catalytic converter lack of combustion cylinder 1 - harmful for catalytic converter lack of combustion cylinder 2 - harmful for catalytic converter lack of combustion cylinder 3 - harmful for catalytic converter lack of combustion cylinder 4 - Air conditioner switch - Air conditioner status - Catalytic converter heating status - test - Oxygen sensor heater (bank 1, sensor 1) - Oxygen sensor heater (bank 1, sensor 2) - transmission type coding - Brake test switch - Intake camshaft position actual value - Cooling agent pressure - Intake camshaft adjustment, set angle - Calculated cooling agent temperature - Metered engine oil temperature - Fuel level signal 2 - Atmospheric pressure voltage sensor - Camshaft control - Charging-air pressure sensor voltage - Intake camshaft control, adaptation - Status electronic fuel pump - Lambda adaption status: Idle - Inlet camsh. timing control status - Exhaust camsh. timing contr. status - Atmospheric pressure sensor - Kilometer reading at MIL activation - Mileage in km on last maintenance - Power steering pressure - Magnetic valve camshaft adjustment - Torque converter-slip speed - Knock sensor test - A/C compressor status - Overtemperature protection - Alternator torque request - Throttle valve motor duty cycle 1 - Battery status - Requested specified idling speed - Lambda sensor adaptation: Current timer offset - Knock detonation, offset adjustment adaption,
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cylinder 1

- Knock detonation, offset adjustment adaption,

cylinder 2

- Knock detonation, offset adjustment adaption,

cylinder 3

- Knock detonation, offset adjustment adaption,

cylinder 4

- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position

• **Actuators**

- Fuel pump relay
- Signal lamp for representing defect, engine

control

- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)
- Injector (cylinder 4)
- solenoid A turbo pressure restriction
- fuel tank evaporation/regeneration valve
- Main relay
- air conditioner compressor relay
- Exhaust camsh.control sol. valve
- Intake camshaft control, solenoid valve
- Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> - Lambda probe heating (B1, S1) - Lambda probe heating (B1, S2) - Immobilizer, warning light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
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HYUNDAI						Santa Fe New - Santa Fe New 2.2 VGT CRDi					
Year	Engine	Liters	HP	System		Functions					
2005/11 -	HTI	2.2	208	Gear box control 5-gears automatic transmission HIVEC 4.2		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Converter slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4 					

HYUNDAI						Santa Fe [CM] - Santa Fe 2.2 CRDi 4x4					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings 					

2006/03 - 2009/11	D4EB	2.2	150 - 155	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor - Vehicle driving speed - Engine revolution - switch, brakes - switch, gear, upward - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve
				Gear box control 5-gears automatic transmission HIVEC 4.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Convertor slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 • Actuators

					<ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4
2009/11 -	D4HB	2.2	197	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor - Vehicle driving speed - Engine revolution - switch, brakes - switch. gear, upward - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve

HYUNDAI					Santa Fe [CM] - Santa Fe 2.2 CRDi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor 	

2006/03 - 2009/11	D4EB	2.2	150 - 155	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> - Vehicle driving speed - Engine revolution - switch, brakes - switch. gear, upward - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve
				Gear box control 5-gears automatic transmission HIVEC 4.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Converter slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4

					<ul style="list-style-type: none"> - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4
2009/11 -	D4HB	2.2	197	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor - Vehicle driving speed - Engine revolution - switch, brakes - switch. gear, upward - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve

HYUNDAI					Santa Fe [CM] - Santa Fe 2.7i 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor - Vehicle driving speed - Engine revolution - switch, brakes - switch. gear, upward 	

2006/03 - 2009/11	G6EA	2.7	170 - 189	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve
				Gear box control 5-gears automatic transmission HIVEC 4.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Convertor slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed

- Magnetic valve for cruising gear
- Brake tape reduction magnetic valve
- Power supply relay gearbox
- Shut-off solenoid valve 2/4

HYUNDAI				Santa Fe [CM] - Santa Fe 2.7i	
Year	Engine	Liters	HP	System	Functions
2006/03 - 2009/11	G6EA	2.7	170 - 189	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor - Vehicle driving speed - Engine revolution - switch, brakes - switch, gear, upward - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement

				<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p> <ul style="list-style-type: none"> - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Converter slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 <p>• Actuators</p> <ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4
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HYUNDAI					Santa Fe [CM] - Santa Fe 2.4i	
Year	Engine	Liters	HP	System	Functions	
2009/11 -	G4KE	2.4	174	<p>Gear box control 6-gears automatic transmission HIVEC 5.5</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor - Vehicle driving speed - Engine revolution - switch, brakes - switch, gear, upward - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C 	

					<ul style="list-style-type: none"> - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve
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HYUNDAI						Santa Fe [CM] - Santa Fe 2.4i 4x4					
Year	Engine	Liters	HP	System		Functions					
2009/11 -	G4KE	2.4	174	Gear box control 6-gears automatic transmission HIVEC 5.5		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor - Vehicle driving speed - Engine revolution - switch, brakes - switch. gear, upward - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve 					

HYUNDAI						Santa Fe [CM] - Santa Fe 2.0 CRDi					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor - Vehicle driving speed - Engine revolution 					

2010/09 -	D4HA	2.0	150	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> - switch, brakes - switch. gear, upward - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve
				Gear box control 5-gears automatic transmission HIVEC 4.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Convertor slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2

					<ul style="list-style-type: none"> - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4
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HYUNDAI Santa Fe [CM] - Santa Fe 2.0 CRDi 4x4

Year	Engine	Liters	HP	System	Functions
2010/09	D4HA	2.0	150	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor - Vehicle driving speed - Engine revolution - switch, brakes - switch. gear, upward - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup

				<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p>	<ul style="list-style-type: none"> - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Converter slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4
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HYUNDAI					Santa Fe [CM] - Santa Fe 3.5i 24V	
Year	Engine	Liters	HP	System	Functions	
2010/10 -		3.5	286	<p>Gear box control 6-gears automatic transmission HIVEC 5.5</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor - Vehicle driving speed - Engine revolution - switch, brakes - switch, gear, upward - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A 	

					<ul style="list-style-type: none"> - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve
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HYUNDAI **Santa Fe [CM] - Santa Fe 3.5i 24V 4x4**

Year	Engine	Liters	HP	System	Functions
2010/10 -		3.5	286	Gear box control 6-gears automatic transmission HIVEC 5.5	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position sensor - Vehicle driving speed - Engine revolution - switch, brakes - switch. gear, upward - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Oil temperature sensor - Current gear - Gearbox input speed - MIL-Status - Transmission output speed - Engine torque - Transformer bridging magnetic valve - Pressure control solenoid valve - Gear shift lever position - Torque converter-slip speed - Kickdown switch status - Pre-selected gear - Torque converter clutch status - Solenoid switch valve F - Sports mode • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Pressure-regulation magnetic valve - Solenoid switch valve F - Torque converter clutch solenoid valve
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control

				<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p>	<ul style="list-style-type: none"> - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Converter slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4
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HYUNDAI					Solaris [RB] - Solaris 1.4	
Year	Engine	Liters	HP	System	Functions	
2011/01 -	G4FA	1.4	107	<p>Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure control solenoid valve A - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D 	

HYUNDAI				Solaris [RB] - Solaris 1.6	
Year	Engine	Liters	HP	System	Functions
2011/01 -	G4FC	1.6	122 - 124	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure control solenoid valve A - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D

HYUNDAI				Solaris [RB] Hatchback - Solaris 1.4 Hatchback	
Year	Engine	Liters	HP	System	Functions
2011/01 -	G4FA	1.4	107	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure control solenoid valve A - Torque converter clutch solenoid valve

					<ul style="list-style-type: none"> - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D
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HYUNDAI Solaris [RB] Hatchback - Solaris 1.6 Hatchback

Year	Engine	Liters	HP	System	Functions
2011/01 -	G4FC	1.6	122	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure control solenoid valve A - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D

HYUNDAI Sonata [NF] - Sonata 2.0 CRDi

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification

2006/01 - 2007/12	D4EA	2.0	136 - 143	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for overdrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Converter slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
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HYUNDAI					Sonata [NF] - Sonata 2.0 VGT CRDi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock 	

2006/01
-
2007/10

2.0

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Gear box control
4/5-gears automatic transmission HIVEC 5.2

- Engine revolution
- switch, brakes
- cruise control switch
- gear box oil temperature
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- MIL-Status
- Transmission output speed
- Switch for overdrive deactivation
- Engine torque
- Gearshift solenoid 1
- Gearshift solenoid 2
- Shift release
- Converter slip rotating speed
- Gearshift solenoid 3
- Magnetic valve for crawling speed
- solenoid brake band
- Operating mode switch
- Driving mode
- Target Gear
- Gear hold button
- Clutch damper solenoid valve
- AT-air control magnetic valve
- Power supply relay gearbox
- Gearshift solenoid 5
- Gearshift solenoid 4
- Pressure control solenoid 1 status
- Pressure control solenoid 2 status
- Pressure control solenoid 3 status
- Pressure control solenoid 4 status
- Pressure control solenoid 5 status
- Syst. press. solen. valve duty cycle
- Torque conv. lock-up clutch status
- **Actuators**
 - Magnetic valve for reverse gear lock
 - Solenoid valve: direct gear direct gear
 - Magnetic valve for crawling speed
 - Press. build-up/reduc. solenoid valve
 - solenoid brake band
 - Magnetic valve for cruising gear
 - Brake tape reduction magnetic valve
 - Power supply relay gearbox
 - Pressure-regulation magnetic valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Torque converter clutch solenoid valve
 - Gear indicator lamp D1
 - Gear indicator lamp D2
 - Gear indicator lamp D3
 - Gear indicator lamp D4
 - Gear indicator lamp D5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
- **Error memory**
- **Current values**
 - Air compressor request
 - Vehicle driving speed

2007/11 -	I4D	2.0	151	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for ovedrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Convertor slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
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Year	Engine	Liters	HP	System	Functions
2005/04 - 2007/10	I4	2.0	140	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for overdrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Converter slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve

				<ul style="list-style-type: none"> - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
			Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification

2007/11 -	I4	2.0	140	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for overdrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Converter slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
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HYUNDAI					Sonata [NF] - Sonata 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock 	

Gear box control
4/5-gears automatic transmission HIVEC 5.2

- Engine revolution
- switch, brakes
- cruise control switch
- gear box oil temperature
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- MIL-Status
- Transmission output speed
- Switch for ovedrive deactivation
- Engine torque
- Gearshift solenoid 1
- Gearshift solenoid 2
- Shift release
- Convertor slip rotating speed
- Gearshift solenoid 3
- Magnetic valve for crawling speed
- solenoid brake band
- Operating mode switch
- Driving mode
- Target Gear
- Gear hold button
- Clutch damper solenoid valve
- AT-air control magnetic valve
- Power supply relay gearbox
- Gearshift solenoid 5
- Gearshift solenoid 4
- Pressure control solenoid 1 status
- Pressure control solenoid 2 status
- Pressure control solenoid 3 status
- Pressure control solenoid 4 status
- Pressure control solenoid 5 status
- Syst. press. solen. valve duty cycle
- Torque conv. lock-up clutch status
- **Actuators**
 - Magnetic valve for reverse gear lock
 - Solenoid valve: direct gear direct gear
 - Magnetic valve for crawling speed
 - Press. build-up/reduc. solenoid valve
 - solenoid brake band
 - Magnetic valve for cruising gear
 - Brake tape reduction magnetic valve
 - Power supply relay gearbox
 - Pressure-regulation magnetic valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Torque converter clutch solenoid valve
 - Gear indicator lamp D1
 - Gear indicator lamp D2
 - Gear indicator lamp D3
 - Gear indicator lamp D4
 - Gear indicator lamp D5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
- **Error memory**
- **Current values**
 - Air compressor request
 - Vehicle driving speed

Gear box control
HIVEC 2.1

- throttle valve position
- Switch idle mode
- Magnetic valve for reverse gear lock
- Engine revolution
- switch, brakes
- engine torque
- cruise control switch
- gear box oil temperature
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- Transmission output speed
- Automatic transmission power supply
- Converter slip rotating speed
- Magnetic valve for crawling speed
- solenoid brake band
- Mode switch Hold
- AT-air control magnetic valve
- Brake tape reduction magnetic valve
- **Actuators**
 - Magnetic valve for reverse gear lock
 - Solenoid valve: direct gear direct gear
 - Magnetic valve for crawling speed
 - solenoid brake band
 - Magnetic valve for cruising gear
 - Power supply relay
 - Brake tape reduction magnetic valve

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
- **Error memory**
- **Current values**
 - Throttle valve position (bank 2)
 - Voltage, throttle valve position sensor
 - Vehicle driving speed
 - Coolant temperature sensor voltage
 - Contact switch
 - Fuel pump relay
 - Coolant temperature
 - Pulse-duty factor, fuel tank ventilation valve
 - Input air quantity meter
 - Throttle valve position sensor
 - Idle regulator
 - signal, throttle valve
 - Engine revolution
 - engine loading
 - stop lights switch
 - Knock control, cylinder 1
 - Knock control, cylinder 2
 - Knock control, cylinder 3
 - Knock control, cylinder 4
 - idle signal
 - intake manifold pressure
 - turbo charger pressure
 - Air conditioner compressor relay
 - air quantity
 - Clutch switch
 - recommended idle revolutions
 - start signal
 - Immobilizer
 - Fuel shut-off solenoid valve

2007/11

14

2.4

180

- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4

Engine control
Theta 2.0

- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2

					<ul style="list-style-type: none"> - Camshaft / Crankshaft synchronization - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Inlet camshaft timing control, duty cycle - Exhaust camshaft timing control, duty cycle - Fuel level sensor - Intake air pressure - Voltage intake air pressure sensor - Coolant temp. at engine start - Camshaft adjustment key combination - Turbo charger bypass valve - Throttle valve sensor reference voltage - Throttle valve fully closed - Long-term additive mixture correct. - Long-term multiplic. mixture correc. - Battery charge/discharge current - Battery current sensor voltage - Exhaust camshaft control position - Inlet camshaft control position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Signal lamp for representing defect, engine control - Engine for reg. throttle valve - Injector (cylinder 1) - Injector (cylinder 2) - Injector (cylinder 4) - Injector (cylinder 4) - solenoid A turbo pressure restriction - fuel tank evaporation/regeneration valve - Main relay - air conditioner compressor relay - Exhaust camsh.control sol. valve - Intake camshaft control, solenoid valve - Switchable intake manifold, solenoid valve - Lambda probe heating (B1 , S1) - Lambda probe heating (B1 , S2) - Immobilizer, warning light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control

<p>2004/09 - 2007/10</p>		<p>2.4</p>	<p>166</p>	<p>Gear box control HIVEC 2.1</p>	<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
				<p>Gear box control HIVEC 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

- Adaptive parameters reset
- **Error memory**
- **Current values**
 - Throttle valve position (bank 2)
 - Voltage, throttle valve position sensor
 - Vehicle driving speed
 - Coolant temperature sensor voltage
 - Contact switch
 - Fuel pump relay
 - Coolant temperature
 - Pulse-duty factor, fuel tank ventilation valve
 - Input air quantity meter
 - Throttle valve position sensor
 - Idle regulator
 - signal, throttle valve
 - Engine revolution
 - engine loading
 - stop lights switch
 - Knock control, cylinder 1
 - Knock control, cylinder 2
 - Knock control, cylinder 3
 - Knock control, cylinder 4
 - idle signal
 - intake manifold pressure
 - turbo charger pressure
 - Air conditioner compressor relay
 - air quantity
 - Clutch switch
 - recommended idle revolutions
 - start signal
 - Immobilizer
 - Fuel shut-off solenoid valve
 - fuel tank evaporation/regeneration valve
 - Servo steering wheel pressure sensor
 - system power supply
 - detonations signal
 - switch steering wheel servo
 - Main relay
 - engine oil temperature
 - Lambda compensation
 - Adaptation idle regulator
 - stop lights switch
 - Intake air temperature
 - Fan 1 control
 - Fan 2 control
 - Battery voltage activation
 - Throttle valve position sensor 1
 - Oxygen sensor voltage (bank 1-sensor 1)
 - Oxygen sensor voltage (bank 1-sensor 2)
 - Throttle valve position sensor 2
 - Misfire, cylinder 1
 - Misfire, cylinder 2
 - Misfire, cylinder 3
 - Misfire, cylinder 4
 - Adjust. idle
 - Accumulation time, ignition coil cylinder 1
 - Accumulation time, ignition coil cylinder 2
 - Accumulation time, ignition coil cylinder 3
 - Accumulation time, ignition coil cylinder 4
 - Oxygen sensor heater (bank 1/2, sensor 1)
 - Oxygen sensor heater (bank 1/2, sensor 2)
 - Short-term mixture correction, bank 1
 - O2 sens. heat. (B1, S1) heat. time
 - Oxygen sensor heating (bank 1, sensor 2), heating time
 - Stopping valve, fuel evaporation system
 - Injection time, cylinder 1
 - Injection time, cylinder 2

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Engine control
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- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset

- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- **Actuators**
- Fuel pump relay
- Signal lamp for representing defect, engine control
- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)
- Injector (cylinder 4)
- solenoid A turbo pressure restriction
- fuel tank evaporation/regeneration valve
- Main relay
- air conditioner compressor relay
- Exhaust camsh.control sol. valve
- Intake camshaft control, solenoid valve

					<ul style="list-style-type: none"> - Switchable intake manifold, solenoid valve - Lambda probe heating (B1, S1) - Lambda probe heating (B1, S2) - Immobilizer, warning light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
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HYUNDAI	Sonata [NF] - Sonata 2.0i
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Year	Engine	Liters	HP	System	Functions
				Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for ovedrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Convertor slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status

- Pressure control solenoid 5 status
- Syst. press. solen. valve duty cycle
- Torque conv. lock-up clutch status

• **Actuators**

- Magnetic valve for reverse gear lock
- Solenoid valve: direct gear direct gear
- Magnetic valve for crawling speed
- Press. build-up/reduc. solenoid valve
- solenoid brake band
- Magnetic valve for cruising gear
- Brake tape reduction magnetic valve
- Power supply relay gearbox
- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Torque converter clutch solenoid valve
- Gear indicator lamp D1
- Gear indicator lamp D2
- Gear indicator lamp D3
- Gear indicator lamp D4
- Gear indicator lamp D5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset

• **Error memory**

• **Current values**

- Throttle valve position (bank 2)
- Voltage, throttle valve position sensor
- Vehicle driving speed
- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator

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Engine control
Theta 2.0

- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value

- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure

					<ul style="list-style-type: none"> - Voltage intake air pressure sensor - Coolant temp. at engine start - Camshaft adjustment key combination - Turbo charger bypass valve - Throttle valve sensor reference voltage - Throttle valve fully closed - Long-term additive mixture correct. - Long-term multiplic. mixture correc. - Battery charge/discharge current - Battery current sensor voltage - Exhaust camshaft control position - Inlet camshaft control position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Signal lamp for representing defect, engine control - Engine for reg. throttle valve - Injector (cylinder 1) - Injector (cylinder 2) - Injector (cylinder 4) - Injector (cylinder 4) - solenoid A turbo pressure restriction - fuel tank evaporation/regeneration valve - Main relay - air conditioner compressor relay - Exhaust camsh.control sol. valve - Intake camshaft control, solenoid valve - Switchable intake manifold, solenoid valve - Lambda probe heating (B1, S1) - Lambda probe heating (B1, S2) - Immobilizer, warning light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
2004/09 - 2007/10		2.0	144	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply

					<ul style="list-style-type: none"> - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
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HYUNDAI	Sonata [YF] - Sonata 2.0
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position (bank 2) - Voltage, throttle valve position sensor - Vehicle driving speed - Coolant temperature sensor voltage - Contact switch - Fuel pump relay - Coolant temperature - Pulse-duty factor, fuel tank ventilation valve - Input air quantity meter - Throttle valve position sensor - Idle regulator - signal, throttle valve - Engine revolution - engine loading - stop lights switch - Knock control, cylinder 1 - Knock control, cylinder 2 - Knock control, cylinder 3 - Knock control, cylinder 4 - idle signal - intake manifold pressure - turbo charger pressure - Air conditioner compressor relay - air quantity - Clutch switch - recommended idle revolutions - start signal - Immobilizer - Fuel shut-off solenoid valve - fuel tank evaporation/regeneration valve - Servo steering wheel pressure sensor - system power supply - detonations signal - switch steering wheel servo - Main relay - engine oil temperature - Lambda compensation - Adaptation idle regulator - stop lights switch - Intake air temperature - Fan 1 control

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Engine control
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- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature

- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination

					<ul style="list-style-type: none"> - Turbo charger bypass valve - Throttle valve sensor reference voltage - Throttle valve fully closed - Long-term additive mixture correct. - Long-term multiplic. mixture correc. - Battery charge/discharge current - Battery current sensor voltage - Exhaust camshaft control position - Inlet camshaft control position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Signal lamp for representing defect, engine control - Engine for reg. throttle valve - Injector (cylinder 1) - Injector (cylinder 2) - Injector (cylinder 4) - Injector (cylinder 4) - solenoid A turbo pressure restriction - fuel tank evaporation/regeneration valve - Main relay - air conditioner compressor relay - Exhaust camsh.control sol. valve - Intake camshaft control, solenoid valve - Switchable intake manifold, solenoid valve - Lambda probe heating (B1, S1) - Lambda probe heating (B1, S2) - Immobilizer, warning light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
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HYUNDAI					Sonata [YF] - Sonata 2.4 GDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Evaporative emissions control system • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Reset all adaptation values • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Coolant temperature sensor voltage - Contact switch - Fuel pump relay - Coolant temperature - Pulse-duty factor, fuel tank ventilation valve - Engine revolution - engine loading - stop lights switch - intake manifold pressure - recommended idle revolutions - Immobilizer - Servo steering wheel pressure sensor - system power supply - Main relay 	

<p>2010/02 - 2011/06</p>	<p>Theta II 2.4 GDI</p>	<p>2.4</p>	<p>201</p>	<p>Engine control Theta 2.0 GDI</p>	<ul style="list-style-type: none"> - injected quantity adj. resistor - engine oil temperature - Lambda compensation - Ambient temperature sensor - Rail pressure, nominal - Rail pressure, actual - Intake air temperature - Fan 1 control - Fan 2 control - Battery voltage activation - Throttle valve position sensor 1 - Oxygen sensor voltage (bank 1-sensor 1) - Oxygen sensor voltage (bank 1-sensor 2) - Throttle valve position sensor 2 - Misfire, cylinder 1 - Misfire, cylinder 2 - Misfire, cylinder 3 - Misfire, cylinder 4 - Oxygen sensor heater (bank 1/2, sensor 1) - Oxygen sensor heater (bank 1/2, sensor 2) - O2 sens. heat. (B1, S1) heat. time - Oxygen sensor heating (bank 1, sensor 2), heating time - Stopping valve, fuel evaporation system - Engine operation detected - Cooling agent pressure sensor - intake manifold pressure sensor - MIL-Status - Gas pedal position sensor (%) - Fuel level in the tank - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Ignition angle Cylinder 1 - Ignition angle Cylinder 2 - Ignition angle Cylinder 3 - Ignition angle Cylinder 4 - Camshaft intake valves (bank 1), resultant value - Camshaft exhaust valves (bank 1), resultant value - Lambda target value - Lambda actual value - Cruise control, control light - System in fail safe - harmful for catalytic converter lack of combustion cylinder 1 - harmful for catalytic converter lack of combustion cylinder 2 - harmful for catalytic converter lack of combustion cylinder 3 - harmful for catalytic converter lack of combustion cylinder 4 - Air conditioner switch - Air conditioner status - Cruise control indicator lamp SET - Catalytic converter heating status - Brake test switch - Cooling agent pressure - Metered engine oil temperature - Fuel pressure sensor voltage - Lambda adaption status: Idle - Inlet camsh. timing control status - Exhaust camsh. timing contr. status - Atmospheric pressure sensor - Kilometer reading at MIL activation - Mileage in km on last maintenance - Fuel level gauge - Torque converter-slip speed - Fuel pressure control valve
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- Knock sensor test
- Minimum operating voltage
- A/C compressor status
- Noise/vibration reduction
- Overtemperature protection
- Fuel pressure control difference
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Fuel pressure regulator opening angle
- Fuel pressure regulator closing angle
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel tank pressure control valve
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Status speed control
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Coolant temp. at engine start
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- Injection time cylinder 1 (homogeneous)
- Injection time cylinder 2 (homogeneous)
- Injection time cylinder 3 (homogeneous)
- Injection time cylinder 4 (homogeneous)
- Injection time cylinder 1 (stratified charge)
- Injection time cylinder 2 (stratified charge)
- Injection time cylinder 3 (stratified charge)
- Injection time cylinder 4 (stratified charge)
- **Actuators**
- Fuel pump relay
- Signal lamp for representing defect, engine control
- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)

					<ul style="list-style-type: none"> - Injector (cylinder 4) - fuel tank evaporation/regeneration valve - Main relay - Exhaust camsh.control sol. valve - Intake camshaft control, solenoid valve - Switchable intake manifold, solenoid valve - Lambda probe heating (B1, S1) - Lambda probe heating (B1, S2) - Speed control light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Fuel evaporation shutoff valve - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Fuel pressure regulation - Cruise control indicator lamp SET
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HYUNDAI	Sonata [YF] - Sonata 2.0 LPI
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Coolant temperature sensor voltage - Contact switch - Fuel pump relay - Fuel temperature - engine loading - stop lights switch - fuel-air mixture - Immobilizer - Main relay - Lambda compensation - Intake air temperature - Fan 1 control - Fan 2 control - Battery voltage activation - Throttle valve position sensor 1 - Oxygen sensor voltage (bank 1-sensor 1) - Oxygen sensor voltage (bank 1-sensor 2) - Throttle valve position sensor 2 - Misfire, cylinder 1 - Misfire, cylinder 2 - Misfire, cylinder 3 - Misfire, cylinder 4 - Oxygen sensor heater (bank 1/2, sensor 1) - Oxygen sensor heater (bank 1/2, sensor 2) - Oil temperature sensor - O2 sens. heat. (B1, S1) heat. time - Oxygen sensor heating (bank 1, sensor 2), heating time <ul style="list-style-type: none"> - Injection time, cylinder 1 - Injection time, cylinder 2 - Injection time, cylinder 3 - Injection time, cylinder 4 - Cooling agent pressure sensor - Clutch pedal switch - MIL-Status - Gas pedal position sensor 1 (V)

2009/09 -	Theta II 2.0 LPI	2.0	144	Engine control Theta 2.0 LPI	<ul style="list-style-type: none"> - Gas pedal position sensor 2(V) - Gas pedal position sensor (%) - Cooling agent temperature motor - Ignition angle Cylinder 1 - Ignition angle Cylinder 2 - Ignition angle Cylinder 3 - Ignition angle Cylinder 4 - Lambda target value - Lambda actual value - harmful for catalytic converter lack of combustion cylinder 1 - harmful for catalytic converter lack of combustion cylinder 2 - harmful for catalytic converter lack of combustion cylinder 3 - harmful for catalytic converter lack of combustion cylinder 4 - Air conditioner switch - Air conditioner status - Catalytic converter heating status - Air conditioner compressor request - Brake test switch - Cooling agent pressure - Voltage fuel temperature sensor - Status electronic fuel pump - Lambda adaption status: Idle - Atmospheric pressure sensor - Kilometer reading at MIL activation - Mileage in km on last maintenance - Power steering pressure - Ignition voltage supply - Liquefied petroleum gas switch - Torque converter-slip speed - Engine running - Knock sensor test - Overtemperature protection - Electric fuel pump control unit actuation - Alternator torque request - Throttle valve motor duty cycle 1 - Battery status - Lambda sensor adaptation: Current timer offset - Knock detonation, offset adjustment adaption, cylinder 1 - Knock detonation, offset adjustment adaption, cylinder 2 - Knock detonation, offset adjustment adaption, cylinder 3 - Knock detonation, offset adjustment adaption, cylinder 4 - Intake air temperature on engine start - Time since ignition ON - Throttle valve angle: set value - Battery ageing - Lambda control (b1): Part load adaptation value - Alternator monitoring deactivation by wiper - Alternator monitoring deactivation by blower - Alternator monitoring deactivation by headlights - Fuel system diagnosis status - Gas rail pressure sensor - Battery temperature - Oxygen sensor status (B1, S1) - Oxygen sensor status (B1, S2) - EKP PWM - Lambda control status - Engine speed status - Battery capacity - Intake air temperature sensor voltage - Throttle valve position: Full load
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					<ul style="list-style-type: none"> - PWM Generator - Throttle valve position 1 - Throttle valve position 2 - Camshaft / Crankshaft synchronization - Gas rail pressure - Intake air pressure - Voltage intake air pressure sensor - Coolant temp. at engine start - Ignition angle correction, knock regul., cyl. 1 - Ignition angle correction, knock regul., cyl. 2 - Ignition angle correction, knock regul., cyl. 3 - Ignition angle correction, knock regul., cyl. 4 - Throttle valve sensor reference voltage - Throttle valve fully closed - Engine speed request - Battery charge/discharge current - Battery current sensor voltage - Gas operation indicator lamp - Fuel shut-off solenoid valve 1 - Fuel shut-off solenoid valve 2 • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Signal lamp for representing defect, engine control - Fan radiator 1 relay - Fan radiator 2 relay - Engine for reg. throttle valve - Main relay - air conditioner compressor relay - Liquefied petroleum gas indicator lamp - Lambda probe heating (B1/2, S1) - Lambda probe heating (B1/2, S2) - Fuel shut-off solenoid valve 1 - Fuel shut-off solenoid valve 2 - Fuel injector Cylinder 1 - Fuel injector Cylinder 2 - Fuel injector Cylinder 3 - Fuel injector Cylinder 4
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HYUNDAI Tiburon [GK, GS] - Tiburon 2.0					
Year	Engine	Liters	HP	System	Functions
2003/01 - 2008/08		2.0	140	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed

					<ul style="list-style-type: none"> - Transmission output speed - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI	Tucson - Tucson 2.0 VGT CRDi
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Year	Engine	Liters	HP	System	Functions
2005/12 -		2.0	156	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for ovedrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Convertor slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5

					<ul style="list-style-type: none"> - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
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HYUNDAI					Tucson [JM] - Tucson 2.0i	
Year	Engine	Liters	HP	System	Functions	
2004/09 - 2010/03	G4GC	2.0	141	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock 	

					<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
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HYUNDAI					Tuscani - Tuscani 2.0i	
Year	Engine	Liters	HP	System	Functions	
2001/09 -		2.0	143	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 	

HYUNDAI					Veracruz - Veracruz 3.0 V6 CRDi-VGT	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Neutral position initialization • Error memory • Current values 	

2006/10 -	S	3.0	239	<p>Gear box control 6-gears automatic transmission HIVEC 5.3</p>	<ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Accelerator pedal position - Switch idle mode - Engine revolution - switch, brakes - gear box oil temperature - transmission ratio - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Transmission - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Engine torque - Transmission selector lever position - Converter slip rotating speed - Switch magnetic valve C monitoring - Solenoid valve: fuel-line pressure - Solenoid valve: Pipe pressure, monitoring - Solenoid valve: Torque converter lock-up clutch - SV: TC lock-up clutch, monitoring - Fault codes count - Current switch magnetic valve C - Solenoid shift valve D current - Solenoid shift valve E current - Solenoid shift valve F current - Solenoid shift valve D monitoring - Solenoid shift valve E monitoring - Solenoid shift valve F monitoring • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Solenoid valve: fuel-line pressure - Solenoid switch valve F - Torque converter clutch solenoid valve
				<p>Gear box control</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Switch idle mode - Engine revolution - switch, brakes - solenoid valve relay - gear box oil temperature - transmission ratio - Transmission - Gearbox input speed - MIL-Status - Gas pedal position sensor (%) - Transmission output speed - Sport switch - Air conditioner switch - Automatic transmission power supply - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Selector lever position - Gearshift solenoid 3

			<p>6-gears automatic transmission HIVEC 5.4</p>	<ul style="list-style-type: none"> - Sportronic switch upshift - Sportronic switch downshift - Operating switch speed - Dry-running operation function - Slip rotation speed torque converter bridging - Gearshift solenoid 4 - Solenoid shift valve SLT pressure - Solenoid shift valve SLC 1 current - Solenoid shift valve SLC 2 current - Solenoid shift valve SLU current - MIL requested by fault code - Shift lock solenoid valve - Feedback solenoid valve 1 - Feedback solenoid valve 2 - Feedback solenoid valve 3 - Feedback solenoid valve 4 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1 - Solenoid valve 2 - Solenoid valve 3 - Solenoid valve 4 - solenoid valve relay - Throttle linear solenoid, sw. solenoid valve - Switch solenoid valve SLU - Solenoid shift valve SLC 1 - Solenoid shift valve SLC 2
		<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Converter slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4

Year	Engine	Liters	HP	System	Functions
				Gear box control 6-gears automatic transmission HIVEC 5.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Neutral position initialization • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Accelerator pedal position - Switch idle mode - Engine revolution - switch, brakes - gear box oil temperature - transmission ratio - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Transmission - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Engine torque - Transmission selector lever position - Converter slip rotating speed - Switch magnetic valve C monitoring - Solenoid valve: fuel-line pressure - Solenoid valve: Pipe pressure, monitoring - Solenoid valve: Torque converter lock-up clutch - SV: TC lock-up clutch, monitoring - Fault codes count - Current switch magnetic valve C - Solenoid shift valve D current - Solenoid shift valve E current - Solenoid shift valve F current - Solenoid shift valve D monitoring - Solenoid shift valve E monitoring - Solenoid shift valve F monitoring • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Solenoid valve: fuel-line pressure - Solenoid switch valve F - Torque converter clutch solenoid valve
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Switch idle mode - Engine revolution - switch, brakes - solenoid valve relay - gear box oil temperature - transmission ratio

2006/09 -	3.8	260	<p>Gear box control 6-gears automatic transmission HIVEC 5.4</p>	<ul style="list-style-type: none"> - Transmission - Gearbox input speed - MIL-Status - Gas pedal position sensor (%) - Transmission output speed - Sport switch - Air conditioner switch - Automatic transmission power supply - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Selector lever position - Gearshift solenoid 3 - Sportronic switch upshift - Sportronic switch downshift - Operating switch speed - Dry-running operation function - Slip rotation speed torque converter bridging - Gearshift solenoid 4 - Solenoid shift valve SLT pressure - Solenoid shift valve SLC 1 current - Solenoid shift valve SLC 2 current - Solenoid shift valve SLU current - MIL requested by fault code - Shift lock solenoid valve - Feedback solenoid valve 1 - Feedback solenoid valve 2 - Feedback solenoid valve 3 - Feedback solenoid valve 4 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1 - Solenoid valve 2 - Solenoid valve 3 - Solenoid valve 4 - solenoid valve relay - Throttle linear solenoid, sw. solenoid valve - Switch solenoid valve SLU - Solenoid shift valve SLC 1 - Solenoid shift valve SLC 2
			<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Convertor slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 • Actuators

					<ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4
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HYUNDAI Veracruz - Veracruz 3.8 4x4

Year	Engine	Liters	HP	System	Functions
				Gear box control 6-gears automatic transmission HIVEC 5.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Neutral position initialization • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Accelerator pedal position - Switch idle mode - Engine revolution - switch, brakes - gear box oil temperature - transmission ratio - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Transmission - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Engine torque - Transmission selector lever position - Converter slip rotating speed - Switch magnetic valve C monitoring - Solenoid valve: fuel-line pressure - Solenoid valve: Pipe pressure, monitoring - Solenoid valve: Torque converter lock-up clutch - SV: TC lock-up clutch, monitoring - Fault codes count - Current switch magnetic valve C - Solenoid shift valve D current - Solenoid shift valve E current - Solenoid shift valve F current - Solenoid shift valve D monitoring - Solenoid shift valve E monitoring - Solenoid shift valve F monitoring • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Solenoid valve: fuel-line pressure - Solenoid switch valve F - Torque converter clutch solenoid valve
					<ul style="list-style-type: none"> • Identification • Clear errors

2006/09	-	3.8	260	Gear box control 6-gears automatic transmission HIVEC 5.4	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Switch idle mode - Engine revolution - switch, brakes - solenoid valve relay - gear box oil temperature - transmission ratio - Transmission - Gearbox input speed - MIL-Status - Gas pedal position sensor (%) - Transmission output speed - Sport switch - Air conditioner switch - Automatic transmission power supply - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Selector lever position - Gearshift solenoid 3 - Sportronic switch upshift - Sportronic switch downshift - Operating switch speed - Dry-running operation function - Slip rotation speed torque converter bridging - Gearshift solenoid 4 - Solenoid shift valve SLT pressure - Solenoid shift valve SLC 1 current - Solenoid shift valve SLC 2 current - Solenoid shift valve SLU current - MIL requested by fault code - Shift lock solenoid valve - Feedback solenoid valve 1 - Feedback solenoid valve 2 - Feedback solenoid valve 3 - Feedback solenoid valve 4 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1 - Solenoid valve 2 - Solenoid valve 3 - Solenoid valve 4 - solenoid valve relay - Throttle linear solenoid, sw. solenoid valve - Switch solenoid valve SLU - Solenoid shift valve SLC 1 - Solenoid shift valve SLC 2
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification 	

				<p>Gear box control 5-gears automatic transmission HIVEC 4.2</p> <ul style="list-style-type: none"> - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Converter slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 <p>• Actuators</p> <ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4
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HYUNDAI					Verna - Verna 1.4i	
Year	Engine	Liters	HP	System	Functions	
				<p>Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure control solenoid valve A - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D 	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values 	

2005/09 -	G4FA	1.4	95	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					Verna - Verna 1.4D	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B 	

2011/05 -	D4FC	1.4	90	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp <p>• Actuators</p> <ul style="list-style-type: none"> - Pressure control solenoid valve A - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D
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HYUNDAI				Verna - Verna 1.6D	
Year	Engine	Liters	HP	System	Functions
2011/05 -	D4FB	1.6	128	Gear box control Automatic transmission 3/4/5 gears HIVEC 5.6	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Engine revolution - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - Current gear - Gearbox input speed - Transmission output speed - Transmission selector levers switch - Pressure control solenoid valve - Torque converter clutch status - Slip rotation speed torque converter bridging - Voltage at main relay - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure control solenoid valve A - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D

HYUNDAI				Verna - Verna 1.3i 8V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory

1999/06 - 2005/08		1.3	85	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Current values - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI Verna - Verna 1.5i 8V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset • Error memory • Current values - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock

1999/06 - 2002/07		1.5	96	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI				Verna - Verna 1.5i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C

1999/06 - 2002/07	1.5	108	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI				Verna - Verna 1.5 VGT	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear

2005/09 -		1.5	152	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI				Verna - Verna 1.6i VVT	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position

2005/09 -		1.6	112	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					
Verna New - Verna New 1.3i					
Year	Engine	Liters	HP	System	Functions
2002/07 - 2005/09		1.3	85	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A

					<ul style="list-style-type: none"> - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					Verna New - Verna New 1.5i	
Year	Engine	Liters	HP	System	Functions	
2002/07 - 2005/09		1.5	91	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve 	

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI				i30 [FD, FDH] - i30 1.4	
Year	Engine	Liters	HP	System	Functions
2007/09 -	G4FA	1.4	105 - 109	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5

					<ul style="list-style-type: none"> • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					i30 [FD, FDH] - i30 1.6	
Year	Engine	Liters	HP	System	Functions	
2007/09 -	G4FC	1.6	116 - 126	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset • Error memory • Current values - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 	

					<ul style="list-style-type: none"> - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI	i30 [FD, FDH] - i30 2.0
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Year	Engine	Liters	HP	System	Functions
2007/09 -	G4GC...	2.0	143	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band

					<ul style="list-style-type: none"> - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI	i30 [FD, FDH] - i30 1.6 CRDi
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Year	Engine	Liters	HP	System	Functions
2007/09 -	D4FB	1.6	110 - 116	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
2007/10 -	D4FB	1.6	90	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request

2008/11 -	D4FB	1.6	128	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					i30 [FD, FDH] - i30 2.0 CRDi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch 	

2007/09 -	D4EA	2.0	136 - 140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					i30 [FD, FDH] - i30 1.4 LPG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature 	

2009/03 - 2010/12	G4FA	1.4	103 - 109	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI				i30 [FD, FDH] - i30 1.6 LPG	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement

2009/03 - 2010/12	G4FC	1.6	120	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					i30 [FD, FDH] - i30 2.0 LPG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed 	

2009/03 - 2010/12	G4GC	2.0	136	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Switch for ovedrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					
i30 [FD, FDH] CW - i30 1.6 CW					
Year	Engine	Liters	HP	System	Functions
2008/03 -	G4FC	1.6	116 - 126	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed

					<ul style="list-style-type: none"> - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					i30 [FD, FDH] CW - i30 2.0 CW	
Year	Engine	Liters	HP	System	Functions	
2008/03 -	G4GC...	2.0	143	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 	

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI				i30 [FD, FDH] CW - i30 1.6 CRDi CW	
Year	Engine	Liters	HP	System	Functions
2008/02 -	D4FB	1.6	116	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock

					<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
2008/11 -	D4FB	1.6	128	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve

- Power supply relay gearbox
- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3

HYUNDAI i30 [FD, FDH] CW - i30 2.0 CRDi CW

Year	Engine	Liters	HP	System	Functions
2008/03 -	D4EA	2.0	136 - 140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3

HYUNDAI				i30 [FD, FDH] CW - i30 1.4 CW	
Year	Engine	Liters	HP	System	Functions
2009/08 -	G4FA	1.4	105 - 109	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3

HYUNDAI				i30 [FD, FDH] CW - i30 1.4 LPG CW	

Year	Engine	Liters	HP	System	Functions
2009/03 - 2010/12	G4FA	1.4	103	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3

HYUNDAI

i30 [FD, FDH] CW - i30 1.6 LPG CW

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

2009/03 - 2010/12	G4FC	1.6	120	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI					
i30 [FD, FDH] CW - i30 2.0 LPG CW					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed

2009/03 - 2010/12	G4GC	2.0	136	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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HYUNDAI ix35 [EL] - ix35 2.0					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Control unit reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor pressure signal - Air compressor request - Power supply - Vehicle driving speed - Coolant temperature - Battery voltage

2010/01	G4KD	2.0	163 - 166	Engine control Theta 2.1	<ul style="list-style-type: none"> - stop lights switch - Knock control, cylinder 1 - Knock control, cylinder 2 - Knock control, cylinder 3 - Knock control, cylinder 4 - fuel correction (bank 1) - Knock sensor 1 (bank 1) - Main relay - Throttle valve angle, potentiometer path 1 - Throttle valve angle, potentiometer path 2 - Intake air temperature - Ignition - Throttle valve position sensor 1 - Throttle valve position sensor 2 - Oxygen sensor bank 1, sensor 1) - Oxygen sensor (bank 1, sensor 2) - Pulse-duty factor, exhausted gases valve actuator - Engine operation detected - Clutch pedal switch - intake manifold pressure sensor - Pulse duty factor, intake manifold valve - Ambient pressure - MIL-Status - Switch identification - Throttle valves servo motor control - Idle running speed target value - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Ignition angle Cylinder 1 - Ignition angle Cylinder 2 - Ignition angle Cylinder 3 - Ignition angle Cylinder 4 - Fuel evaporation control valve, spray rate - Short-term mix. correction B1 (OBD) - Lambda target value - Lambda actual value - Air conditioner pressure sensor voltage - harmful for catalytic converter lack of combustion cylinder 1 - harmful for catalytic converter lack of combustion cylinder 2 - harmful for catalytic converter lack of combustion cylinder 3 - harmful for catalytic converter lack of combustion cylinder 4 - Cruise control indicator lamp CRUISE - Cruise control indicator lamp SET - Lambda probe heating resistance (B1, S1) - Lambda probe heating resistance (B1, S2) - Air conditioner compressor control - Brake test switch - Oxygen sensor bank 1, sensor 1) - Oxygen sensor bank 2, sensor 1) - Cooling agent temperature voltage - Turbine wheel speed - Cruise control on/off switch - Engine speed actual value - Inlet camsh. timing control status - Kilometer reading at MIL activation - Gas pedal position - Telephone antenna signal strength - Control unit sensor voltage 4 - Engine operating mode - Heated catalyst enabled - Mileage since fault memory cleared - Electric fuel pump control unit actuation - Inlet camshaft control test (b1): result
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					<ul style="list-style-type: none"> - Exhaust camshaft adjustment test B1: Result - Diagnostic connector VIM status - Intake air temperature on engine start - Time since ignition ON - Short-term oxygen sensor control adjustment <p>B1</p> <ul style="list-style-type: none"> - Throttle valve position: closed - Transmission oil temperature: calculated - AC start/stop authorization - Fan high speed - Fan low speed - Right overheating protection control unit - Inlet camshaft reset valve B1 - Exhaust camshaft reset valve B1 - Battery discharge status - Intake air temperature sensor voltage - Throttle valve position: Full load - Camshaft / Crankshaft synchronization - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Control unit sensor voltage 3 - Voltage intake air pressure sensor - Coolant temp. at engine start - Lambda control loop monitoring - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 - Var. valve timing press. switch/exh. - Sensor reference voltage 1 - Sensor reference voltage 2 - Part load status <p>• Actuators</p> <ul style="list-style-type: none"> - Disconnection of fuel injector Cylinder 1 - Disconnection of fuel injector Cylinder 2 - Disconnection of fuel injector Cylinder 3 - Disconnection of fuel injector Cylinder 4 - Fuel pump relay - Engine for reg. throttle valve - Main relay - air conditioner compressor relay - Container valve - Engine management system error lights - Inlet camshaft timing control (bank 1) - Exhaust camshaft timing control (bank 1) - Immobilizer control lamp - Speed control light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Radiator fan high speed - Radiator fan: low speed - Oxygen sensor heating, sensor 1 - Oxygen sensor heating, sensor 2 - Variable intake system solenoid valve
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HYUNDAI					ix35 [EL] - ix35 2.0 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset 	

2010/01 -	G4KD	2.0	163	Engine control Theta 2.1	<ul style="list-style-type: none"> - Control unit reset • Error memory • Current values - Air compressor pressure signal - Air compressor request - Power supply - Vehicle driving speed - Coolant temperature - Battery voltage - stop lights switch - Knock control, cylinder 1 - Knock control, cylinder 2 - Knock control, cylinder 3 - Knock control, cylinder 4 - fuel correction (bank 1) - Knock sensor 1 (bank 1) - Main relay - Throttle valve angle, potentiometer path 1 - Throttle valve angle, potentiometer path 2 - Intake air temperature - Ignition - Throttle valve position sensor 1 - Throttle valve position sensor 2 - Oxygen sensor bank 1, sensor 1) - Oxygen sensor (bank 1, sensor 2) - Pulse-duty factor, exhausted gases valve actuator - Engine operation detected - Clutch pedal switch - intake manifold pressure sensor - Pulse duty factor, intake manifold valve - Ambient pressure - MIL-Status - Switch identification - Throttle valves servo motor control - Idle running speed target value - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Ignition angle Cylinder 1 - Ignition angle Cylinder 2 - Ignition angle Cylinder 3 - Ignition angle Cylinder 4 - Fuel evaporation control valve, spray rate - Short-term mix. correction B1 (OBD) - Lambda target value - Lambda actual value - Air conditioner pressure sensor voltage - harmful for catalytic converter lack of combustion cylinder 1 - harmful for catalytic converter lack of combustion cylinder 2 - harmful for catalytic converter lack of combustion cylinder 3 - harmful for catalytic converter lack of combustion cylinder 4 - Cruise control indicator lamp CRUISE - Cruise control indicator lamp SET - Lambda probe heating resistance (B1, S1) - Lambda probe heating resistance (B1, S2) - Air conditioner compressor control - Brake test switch - Oxygen sensor bank 1, sensor 1) - Oxygen sensor bank 2, sensor 1) - Cooling agent temperature voltage - Turbine wheel speed - Cruise control on/off switch - Engine speed actual value - Inlet camsh. timing control status
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- Kilometer reading at MIL activation
- Gas pedal position
- Telephone antenna signal strength
- Control unit sensor voltage 4
- Engine operating mode
- Heated catalyst enabled
- Mileage since fault memory cleared
- Electric fuel pump control unit actuation
- Inlet camshaft control test (b1): result
- Exhaust camshaft adjustment test B1: Result
- Diagnostic connector VIM status
- Intake air temperature on engine start
- Time since ignition ON
- Short-term oxygen sensor control adjustment

B1

- Throttle valve position: closed
- Transmission oil temperature: calculated
- AC start/stop authorization
- Fan high speed
- Fan low speed
- Right overheating protection control unit
- Inlet camshaft reset valve B1
- Exhaust camshaft reset valve B1
- Battery discharge status
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Control unit sensor voltage 3
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Lambda control loop monitoring
- Injection time/cylinder 1
- Injection time/cylinder 2
- Injection time/cylinder 3
- Injection time/cylinder 4
- Var. valve timing press. switch/exh.
- Sensor reference voltage 1
- Sensor reference voltage 2
- Part load status

• Actuators

- Disconnection of fuel injector Cylinder 1
- Disconnection of fuel injector Cylinder 2
- Disconnection of fuel injector Cylinder 3
- Disconnection of fuel injector Cylinder 4
- Fuel pump relay
- Engine for reg. throttle valve
- Main relay
- air conditioner compressor relay
- Container valve
- Engine management system error lights
- Inlet camshaft timing control (bank 1)
- Exhaust camshaft timing control (bank 1)
- Immobilizer control lamp
- Speed control light
- Ignition coil Cylinder 1
- Ignition coil Cylinder 2
- Ignition coil Cylinder 3
- Ignition coil Cylinder 4
- Radiator fan high speed
- Radiator fan: low speed
- Oxygen sensor heating, sensor 1
- Oxygen sensor heating, sensor 2
- Variable intake system solenoid valve

Year	Engine	Liters	HP	System	Functions
2009/04 -	D6EA	3.0	239	Gear box control 6-gears automatic transmission HIVEC 5.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Neutral position initialization • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Accelerator pedal position - Switch idle mode - Engine revolution - switch, brakes - gear box oil temperature - transmission ratio - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Transmission - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Engine torque - Transmission selector lever position - Convertor slip rotating speed - Switch magnetic valve C monitoring - Solenoid valve: fuel-line pressure - Solenoid valve: Pipe pressure, monitoring - Solenoid valve: Torque converter lock-up clutch - SV: TC lock-up clutch, monitoring - Fault codes count - Current switch magnetic valve C - Solenoid shift valve D current - Solenoid shift valve E current - Solenoid shift valve F current - Solenoid shift valve D monitoring - Solenoid shift valve E monitoring - Solenoid shift valve F monitoring • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Solenoid valve: fuel-line pressure - Solenoid switch valve F - Torque converter clutch solenoid valve

[Carens - Carens 1.8i](#)

[Carens I - Carens I 1.8 LPG](#)

[Carens I - Carens I 2.0 LPG](#)

[Carens II - Carens II 1.8 LPG](#)

[Carens II - Carens II 2.0 LPG](#)

[Carens II - Carens II 2.0 CRDi](#)

[Carens II - Carens II 1.8i](#)

[Carens New - Carens New 2.0 VGT CRDi](#)

[Carens New - Carens New 2.0 LPI](#)

[Carens \[FC\] - Carens 1.8i](#)

[Carens \[FC\] - Carens 2.0 CRDi](#)

[Carens \[FC\] - Carens 1.6i](#)

[Carens \[FC\] - Carens 2.0i](#)

[Carens \[FC\] - Carens 2.0 CRDi VGT](#)

[Carens \[FG\] - Carens 2.0 CVVT](#)

[Carens \[FG\] - Carens 1.6](#)

[Carnival - Carnival 2.7 LPI](#)

[Carnival - Carnival 2.9 VGT CRDi](#)

[Carnival - Carnival 2.9 WGT CRDi](#)

[Carnival \[MB\] - Carnival 2.9 CRDi](#)

[Cee'd \[ED, FF2\] - Cee'd 1.4](#)

[Cee'd \[ED, FF2\] - Cee'd 1.6](#)

[Cee'd \[ED, FF2\] - Cee'd 2.0](#)

[Cee'd \[ED, FF2\] - Cee'd 1.6 CRDi](#)

[Cee'd \[ED, FF2\] - Cee'd 2.0 CRDi](#)

[Cee'd \[ED, FF2\] Sporty Wagon - Cee'd 2.0 CRDi Sporty Wagon](#)

[Cee'd \[ED, FF2\] Sporty Wagon - Cee'd 2.0 Sporty Wagon](#)

[Cee'd \[ED, FF2\] Sporty Wagon - Cee'd 1.6 CRDi Sporty Wagon](#)

[Cee'd \[ED, FF2\] Sporty Wagon - Cee'd 1.6 Sporty Wagon](#)

[Cee'd \[ED, FF2\] Sporty Wagon - Cee'd 1.4 Sporty Wagon](#)

[Cerato - Cerato 1.5 VGT CRDi](#)

[Cerato \[FE\] - Cerato 1.6 CRDi](#)

[Grand Carnival \[VQ\] - Grand Carnival 2.2 Diesel](#)

[Grand Carnival \[VQ\] - Grand Carnival 2.7 LPI](#)

[K2 - K2 1.4i](#)

[K2 - K2 1.6i](#)

[K5 - K5 2.0i](#)

[K5 - K5 2.4 GDI](#)

[K5 - K5 2.0 LPI](#)

[K5 - K5 2.0 Turbo GDI](#)

[Lotze - Lotze 2.0 VGT CRDi](#)

[Lotze - Lotze 1.8i CVVT](#)

[Lotze - Lotze 2.0i CVVT](#)

[Lotze - Lotze 2.4i CVVT](#)

[Lotze - Lotze 2.0 LPI](#)

[Magentis - Magentis 2.5i](#)

[Mohave - Mohave 3.0 CRDi](#)
[Optima \[TF\] - Optima 1.7 CRDi](#)
[Optima \[TF\] - Optima 2.0](#)
[Optima \[TF\] - Optima 2.4](#)
[Pride New - Pride New 1.5 VGT CRDi](#)
[Rondo - Rondo 2.4](#)
[Sedona - Sedona 3.8i](#)
[Sorento - Sorento 2.5 VGT CRDi](#)
[Sorento - Sorento 3.8](#)
[Sorento \[JC\] - Sorento 2.5 CRDi](#)
[Sorento \[JC\] - Sorento 3.5i](#)
[Sorento \[JC\] - Sorento 3.8i](#)
[Sorento \[XM\] - Sorento 2.4](#)
[Sorento \[XM\] - Sorento 2.4 4x4](#)
[Spectra - Spectra 2.0i](#)
[Spectra Hatchback - Spectra 2.0i Hatchback](#)
[Spectra5 Hatchback - Spectra5 2.0i 16V Hatchback](#)
[Sportage - Sportage 2.0](#)
[Sportage - Sportage 2.0 TCI](#)
[Sportage - Sportage 2.0i 4x4](#)
[Sportage - Sportage 2.0 4x4](#)
[Sportage - Sportage 2.0i](#)
[Sportage New - Sportage New 2.0i](#)
[Sportage New - Sportage New 2.7i](#)
[Sportage New - Sportage New 2.7i 4x4](#)
[Sportage New - Sportage New 2.0 VGT CRDi](#)
[Sportage New - Sportage New 2.0 CRDi](#)
[Sportage \[JA\] - Sportage 2.0i](#)
[Sportage \[JE\] - Sportage 2.0i](#)
[Sportage \[JE\] - Sportage 2.0i 4x4](#)
[Sportage \[JE\] - Sportage 2.7i 4x4](#)
[Sportage \[JE\] - Sportage 2.0](#)
[Sportage \[JE\] - Sportage 2.0 4x4](#)
[Sportage \[JE\] - Sportage 2.7](#)
[Sportage \[JE\] - Sportage 2.7 4x4](#)
[Sportage \[JE\] - Sportage 2.0 CRDi 4x4](#)
[Sportage \[JE\] - Sportage 2.0 CRDi](#)

KIA					Carens - Carens 1.8i	
Year	Engine	Liters	HP	System	Functions	
2001/01 -	T8D	1.8	167	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve 	

KIA					Carens I - Carens I 1.8 LPG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control 	

1999/04 - 2002/01	T8D	1.8	108	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
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KIA					
Carens I - Carens I 2.0 LPG					
Year	Engine	Liters	HP	System	Functions
1999/04 - 2002/03		2.0	123	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay

- Brake tape reduction magnetic valve

KIA						Carens II - Carens II 1.8 LPG					
Year	Engine	Liters	HP	System	Functions						
2002/02 - 2006/04	T8D	1.8	108	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve 						

KIA						Carens II - Carens II 2.0 LPG					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch 						

2002/02 - 2006/04		2.0	123	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
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KIA					
Carens II - Carens II 2.0 CRDi					
Year	Engine	Liters	HP	System	Functions
2002/02 - 2006/04		2.0	115	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset • Error memory • Current values - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band

					<ul style="list-style-type: none"> - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
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KIA						Carens II - Carens II 1.8i					
Year	Engine	Liters	HP	System	Functions						
2002/02 - 2005/09	T8D	1.8	126	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve 						

KIA						Carens New - Carens New 2.0 VGT CRDi					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution 						

2006/04 -	2.0	199	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for ovedrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Converter slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
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KIA					Carens New - Carens New 2.0 LPI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset 	

2006/04
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2.0

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Gear box control
4/5-gears automatic transmission HIVEC 5.2

• **Error memory**

• **Current values**

- Air compressor request
- Vehicle driving speed
- throttle valve position
- Switch idle mode
- kick-down switch
- Magnetic valve for reverse gear lock
- Engine revolution
- switch, brakes
- cruise control switch
- gear box oil temperature
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- MIL-Status
- Transmission output speed
- Switch for overdrive deactivation
- Engine torque
- Gearshift solenoid 1
- Gearshift solenoid 2
- Shift release
- Converter slip rotating speed
- Gearshift solenoid 3
- Magnetic valve for crawling speed
- solenoid brake band
- Operating mode switch
- Driving mode
- Target Gear
- Gear hold button
- Clutch damper solenoid valve
- AT-air control magnetic valve
- Power supply relay gearbox
- Gearshift solenoid 5
- Gearshift solenoid 4
- Pressure control solenoid 1 status
- Pressure control solenoid 2 status
- Pressure control solenoid 3 status
- Pressure control solenoid 4 status
- Pressure control solenoid 5 status
- Syst. press. solen. valve duty cycle
- Torque conv. lock-up clutch status

• **Actuators**

- Magnetic valve for reverse gear lock
- Solenoid valve: direct gear direct gear
- Magnetic valve for crawling speed
- Press. build-up/reduc. solenoid valve
- solenoid brake band
- Magnetic valve for cruising gear
- Brake tape reduction magnetic valve
- Power supply relay gearbox
- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Torque converter clutch solenoid valve
- Gear indicator lamp D1
- Gear indicator lamp D2
- Gear indicator lamp D3
- Gear indicator lamp D4
- Gear indicator lamp D5

Year	Engine	Liters	HP	System	Functions
1999/04 - 2002/05	TB	1.8	110	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
2000/03 -	TB	1.8	126	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification

2002/05					<ul style="list-style-type: none"> - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
2002/09 - 2006/12	TB	1.8	126	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve

KIA					Carens [FC] - Carens 2.0 CRDi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors 	

2002/04 - 2006/12	D4EA	2.0	113	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
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KIA					
Carens [FC] - Carens 1.6i					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2006/12	S6D	1.6	105	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed

					<ul style="list-style-type: none"> - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
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KIA	Carens [FC] - Carens 2.0i				
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Year	Engine	Liters	HP	System	Functions
				Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory

• **Current values**

- Throttle valve position (bank 2)
- Voltage, throttle valve position sensor
- Vehicle driving speed
- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4

2004/08
-
2006/12

G4GC

2.0

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Engine control
Theta 2.0

- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1

- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- **Actuators**
- Fuel pump relay
- Signal lamp for representing defect, engine control
- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)
- Injector (cylinder 4)
- solenoid A turbo pressure restriction
- fuel tank evaporation/regeneration valve
- Main relay
- air conditioner compressor relay
- Exhaust camsh.control sol. valve
- Intake camshaft control, solenoid valve
- Switchable intake manifold, solenoid valve
- Lambda probe heating (B1, S1)

					<ul style="list-style-type: none"> - Lambda probe heating (B1, S2) - Immobilizer, warning light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
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KIA Carens [FC] - Carens 2.0 CRDi VGT

Year	Engine	Liters	HP	System	Functions
2005/09 - 2006/12	D4EA	2.0	140	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve

KIA Carens [FG] - Carens 2.0 CVVT

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset

- **Error memory**

- **Current values**

- Throttle valve position (bank 2)
- Voltage, throttle valve position sensor
- Vehicle driving speed
- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3

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Engine control
Theta 2.0

- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption,

cylinder 1

- Knock detonation, offset adjustment adaption,

cylinder 2

- Knock detonation, offset adjustment adaption,

cylinder 3

- Knock detonation, offset adjustment adaption,

cylinder 4

- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position

• **Actuators**

- Fuel pump relay
- Signal lamp for representing defect, engine control

control

- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)
- Injector (cylinder 4)
- solenoid A turbo pressure restriction
- fuel tank evaporation/regeneration valve
- Main relay
- air conditioner compressor relay
- Exhaust camsh.control sol. valve
- Intake camshaft control, solenoid valve
- Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> - Lambda probe heating (B1, S1) - Lambda probe heating (B1, S2) - Immobilizer, warning light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
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KIA	Carens [FG] - Carens 1.6
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position (bank 2) - Voltage, throttle valve position sensor - Vehicle driving speed - Coolant temperature sensor voltage - Contact switch - Fuel pump relay - Coolant temperature - Pulse-duty factor, fuel tank ventilation valve - Input air quantity meter - Throttle valve position sensor - Idle regulator - signal, throttle valve - Engine revolution - engine loading - stop lights switch - Knock control, cylinder 1 - Knock control, cylinder 2 - Knock control, cylinder 3 - Knock control, cylinder 4 - idle signal - intake manifold pressure - turbo charger pressure - Air conditioner compressor relay - air quantity - Clutch switch - recommended idle revolutions - start signal - Immobilizer - Fuel shut-off solenoid valve - fuel tank evaporation/regeneration valve - Servo steering wheel pressure sensor - system power supply - detonations signal - switch steering wheel servo - Main relay - engine oil temperature - Lambda compensation - Adaptation idle regulator - stop lights switch - Intake air temperature - Fan 1 control - Fan 2 control - Battery voltage activation

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Engine control
Theta 2.0

- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2

- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage

					<ul style="list-style-type: none"> - Throttle valve fully closed - Long-term additive mixture correct. - Long-term multiplic. mixture correc. - Battery charge/discharge current - Battery current sensor voltage - Exhaust camshaft control position - Inlet camshaft control position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Signal lamp for representing defect, engine control - Engine for reg. throttle valve - Injector (cylinder 1) - Injector (cylinder 2) - Injector (cylinder 4) - Injector (cylinder 4) - solenoid A turbo pressure restriction - fuel tank evaporation/regeneration valve - Main relay - air conditioner compressor relay - Exhaust camsh.control sol. valve - Intake camshaft control, solenoid valve - Switchable intake manifold, solenoid valve - Lambda probe heating (B1, S1) - Lambda probe heating (B1, S2) - Immobilizer, warning light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
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KIA					Carnival - Carnival 2.7 LPI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed 	

2006/10	K5M	2.7	161	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> - Switch for overdrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Converter slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
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KIA						Carnival - Carnival 2.9 VGT CRDi					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control 					

2007/11 -	J3	2.9	192	<p>Gear box control 4/5-gears automatic transmission HIVEC 5.2</p>	<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for overdrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Converter slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Neutral position initialization • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Accelerator pedal position - Switch idle mode - Engine revolution - switch, brakes

Gear box control
6-gears automatic transmission HIVEC 5.3

- gear box oil temperature
- transmission ratio
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Transmission
- Gearbox input speed
- Transmission output speed
- Automatic transmission power supply
- Engine torque
- Transmission selector lever position
- Converter slip rotating speed
- Switch magnetic valve C monitoring
- Solenoid valve: fuel-line pressure
- Solenoid valve: Pipe pressure, monitoring
- Solenoid valve: Torque converter lock-up clutch
- SV: TC lock-up clutch, monitoring
- Fault codes count
- Current switch magnetic valve C
- Solenoid shift valve D current
- Solenoid shift valve E current
- Solenoid shift valve F current
- Solenoid shift valve D monitoring
- Solenoid shift valve E monitoring
- Solenoid shift valve F monitoring
- **Actuators**
 - Solenoid switch valve A
 - Solenoid switch valve B
 - Solenoid switch valve C
 - Solenoid switch valve D
 - Solenoid switch valve E
 - Solenoid valve: fuel-line pressure
 - Solenoid switch valve F
 - Torque converter clutch solenoid valve

Gear box control
5-gears automatic transmission HIVEC 4.2

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
- **Error memory**
- **Current values**
 - Air compressor request
 - Vehicle driving speed
 - Solenoid valve 1/reverse-gear locking
 - Engine revolution
 - gear box oil temperature
 - gears engagement control
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Tiptronic switch: identification
 - Overdrive solenoid valve
 - Electronic control unit supply voltage
 - Gear lever position
 - Gearbox input speed
 - Transmission output speed
 - Engine torque
 - Converter slip rotating speed
 - Magnetic valve for crawling speed
 - Shut-off solenoid valve 2/4
 - Brake tape reduction magnetic valve
 - Pressure-regulation magnetic valve 1
- **Actuators**
 - Solenoid valve 1/reverse-gear locking
 - Solenoid valve: direct gear direct gear
 - Selector lever position indication: 5
 - Selector lever position indication: 4
 - Selector lever position indication: 3

					<ul style="list-style-type: none"> - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4
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KIA	Carnival - Carnival 2.9 WGT CRDi
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Year	Engine	Liters	HP	System	Functions
				Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for ovedrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Converter slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear

2005/07 - 2007/10	J3	2.9	170		<ul style="list-style-type: none"> - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
Gear box control 5-gears automatic transmission HIVEC 4.2					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Convertor slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4

KIA Carnival [MB] - Carnival 2.9 CRDi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset

2006/04 -	J3	2.9	185	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for overdrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Converter slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
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Year	Engine	Liters	HP	System	Functions
2006/11 - 2009/08	G4FA	1.4	109	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset

2009/09 -	G4FA	1.4	90	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B

2011/01 -	G4FA	1.4	105	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Cee'd [ED, FF2] - Cee'd 1.6					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control

2006/11 - 2008/01	G4FC	1.6	122	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
2008/02	G4FC	1.6	125 -	Gear box control	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Convertor slip rotating speed

-			126	4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA					
Cee'd [ED, FF2] - Cee'd 2.0					
Year	Engine	Liters	HP	System	Functions
2006/11 -	G4GC	2.0	143	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band

					<ul style="list-style-type: none"> - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA					
Cee'd [ED, FF2] - Cee'd 1.6 CRDi					
Year	Engine	Liters	HP	System	Functions
2006/11 -	D4FB-L	1.6	90	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3

					<ul style="list-style-type: none"> - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
2010/09 -	D4FB	1.6	128	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1

					<ul style="list-style-type: none"> - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Cee'd [ED, FF2] - Cee'd 2.0 CRDi					
Year	Engine	Liters	HP	System	Functions
2007/09 -	D4EA-F	2.0	140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox

- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3

KIA Cee'd [ED, FF2] Sporty Wagon - Cee'd 2.0 CRDi Sporty Wagon					
Year	Engine	Liters	HP	System	Functions
2007/09 -	D4EA-F	2.0	140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3

KIA Cee'd [ED, FF2] Sporty Wagon - Cee'd 2.0 Sporty Wagon					
Year	Engine	Liters	HP	System	Functions
2007/09 -	G4GC	2.0	143	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3

KIA Cee'd [ED, FF2] Sporty Wagon - Cee'd 1.6 CRDi Sporty Wagon					
Year	Engine	Liters	HP	System	Functions

2007/09 -	D4FB-L	1.6	90	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position

2010/09 -	D4FB	1.6	128	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Cee'd [ED, FF2] Sporty Wagon - Cee'd 1.6 Sporty Wagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B

2007/09 -	G4FC	1.6	122 - 126	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Cee'd [ED, FF2] Sporty Wagon - Cee'd 1.4 Sporty Wagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control

2007/09 - 2009/08	G4FA	1.4	109	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
2009/09	G4FA	1.4	90	Gear box control	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Convertor slip rotating speed

				4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
2011/01 -	G4FA	1.4	105	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Cerato - Cerato 1.5 VGT CRDi					
Year	Engine	Liters	HP	System	Functions
2005/06 -		1.5	104	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset • Error memory • Current values - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear

					<ul style="list-style-type: none"> - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
2006/01 -		1.5	141	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox

- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3

KIA					Cerato [FE] - Cerato 1.6 CRDi	
Year	Engine	Liters	HP	System	Functions	
2005/06 - 2009/11	D4FB	1.6	116	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 	

Year	Engine	Liters	HP	System	Functions
2010/01 -	R 2.2	2.2	197	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for overdrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Convertor slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
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KIA Grand Carnival [VQ] - Grand Carnival 2.7 LPI

Year	Engine	Liters	HP	System	Functions
2007/01 -	Mu 2.7 LPI	2.7	160	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for ovedrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Convertor slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock

					<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
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KIA					
K2 - K2 1.4i					
Year	Engine	Liters	HP	System	Functions
2011/07 -	G4FA	1.4	107	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - solenoid valve, converter clutch - Engine revolution - switch, brakes - Oil temperature sensor gear box - Inserted gear - throttle valve angle - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Current gear - Gearbox input speed - Transmission output speed - Sport switch - Engine torque - Automatic pressure control solenoid A - Sportronic switch upshift - Sportronic switch downshift - Torque converter-slip speed - Torque converter clutch status - Solenoid switch valve F - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure-regulation magnetic valve - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D - Solenoid shift valve E - Solenoid shift valve F (A)

KIA					K2 - K2 1.6i	
Year	Engine	Liters	HP	System	Functions	
2011/08 -	G4FC	1.6	123	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - solenoid valve, converter clutch - Engine revolution - switch, brakes - Oil temperature sensor gear box - Inserted gear - throttle valve angle - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Current gear - Gearbox input speed - Transmission output speed - Sport switch - Engine torque - Automatic pressure control solenoid A - Sportronic switch upshift - Sportronic switch downshift - Torque converter-slip speed - Torque converter clutch status - Solenoid switch valve F - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure-regulation magnetic valve - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D - Solenoid shift valve E - Solenoid shift valve F (A) 	

KIA					K5 - K5 2.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - solenoid valve, converter clutch - Engine revolution - switch, brakes - Oil temperature sensor gear box - Inserted gear - throttle valve angle - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D 	

Gear box control
6-gears automatic transmission HIVEC 5.7

- Solenoid switch valve E
- transmission ratio
- Acceleration pedal position sensor
- Current gear
- Gearbox input speed
- Transmission output speed
- Sport switch
- Engine torque
- Automatic pressure control solenoid A
- Sportronic switch upshift
- Sportronic switch downshift
- Torque converter-slip speed
- Torque converter clutch status
- Solenoid switch valve F
- Transmission control fault lamp

• **Actuators**

- Pressure-regulation magnetic valve
- Torque converter clutch solenoid valve
- Solenoid shift valve A
- Solenoid shift valve B
- Solenoid shift valve C
- Solenoid shift valve D
- Solenoid shift valve E
- Solenoid shift valve F (A)

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Control unit reset

• **Error memory**

• **Current values**

- Air compressor pressure signal
- Air compressor request
- Power supply
- Vehicle driving speed
- Oxygen sensor, bank 1
- Coolant temperature
- Battery voltage
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- fuel correction (bank 1)
- Knock sensor 1 (bank 1)
- switch steering wheel servo
- Main relay
- Throttle valve angle, potentiometer path 1
- Throttle valve angle, potentiometer path 2
- Intake air temperature
- Throttle valve signal
- Ignition
- Battery voltage activation
- Throttle valve position sensor 1
- Throttle valve position sensor 2
- Oxygen sensor bank 1, sensor 1)
- Oxygen sensor (bank 1, sensor 2)
- Pulse-duty factor, exhausted gases valve

actuator

- Wiper switch
- Headlights
- Engine operation detected
- Clutch pedal switch
- intake manifold pressure sensor
- Pulse duty factor, intake manifold valve
- Ambient pressure
- MIL-Status

2010/05
-

Theta II 2.0
MPI

2.0

165

Engine control
Theta 2.2

- Switch identification
 - Throttle valves servo motor control
 - Idle running speed target value
 - Gas pedal position sensor 1 Voltage
 - Gas pedal position sensor 2 Voltage
 - Ignition angle Cylinder 1
 - Ignition angle Cylinder 2
 - Ignition angle Cylinder 3
 - Ignition angle Cylinder 4
 - Fuel evaporation control valve, spray rate
 - Short-term mix. correction B1 (OBD)
 - Lambda target value
 - Lambda actual value
 - Air conditioner pressure sensor voltage
 - harmful for catalytic converter lack of combustion cylinder 1
 - harmful for catalytic converter lack of combustion cylinder 2
 - harmful for catalytic converter lack of combustion cylinder 3
 - harmful for catalytic converter lack of combustion cylinder 4
 - Cruise control indicator lamp CRUISE
 - Cruise control indicator lamp SET
 - Battery charging status
 - Lambda probe heating resistance (B1, S1)
 - Lambda probe heating resistance (B1, S2)
 - Air conditioner compressor control
 - Brake test switch
 - Oxygen sensor bank 1, sensor 1)
 - Oxygen sensor bank 2, sensor 1)
 - Cooling agent temperature voltage
 - Turbine wheel speed
 - Cruise control switch status
 - Cruise control on/off switch
 - Engine speed actual value
 - Inlet camsh. timing control status
 - Kilometer reading at MIL activation
 - Gas pedal position
 - Cylinder 1 knock sensor ZW correction
 - Cylinder 2 knock sensor ZW correction
 - Cylinder 3 knock sensor ZW correction
 - Cylinder 4 knock sensor ZW correction
 - Telephone antenna signal strength
 - Cruise control switch signal voltage
 - Control unit sensor voltage 4
 - Engine operating mode
 - Generator charge signal
 - Heated catalyst enabled
 - Mileage since fault memory cleared
 - Electric fuel pump control unit actuation
 - Battery state
 - Inlet camshaft control test (b1): result
 - Exhaust camshaft adjustment test B1: Result
 - Diagnostic connector VIM status
 - Intake air temperature on engine start
 - Time since ignition ON
 - Exhaust system injection PWM signal
 - Short-term oxygen sensor control adjustment
- B1
- Throttle valve position: closed
 - Alternator load signal filtered raw value
 - Transmission oil temperature: calculated
 - AC start/stop authorization
 - Fan high speed
 - Fan low speed
 - Right overheating protection control unit
 - Inlet camshaft reset valve B1

				<ul style="list-style-type: none"> - Exhaust camshaft reset valve B1 - Battery temperature - Battery capacity - Battery discharge status - Intake air temperature sensor voltage - Throttle valve position: Full load - PWM Generator - Camshaft / Crankshaft synchronization - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Control unit sensor voltage 3 - Voltage intake air pressure sensor - Coolant temp. at engine start - Lambda control loop monitoring - Fresh air blower, maximum speed - Battery charge/discharge current - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 - Var. valve timing press. switch/exh. - Sensor reference voltage 1 - Sensor reference voltage 2 - Part load status • Actuators <ul style="list-style-type: none"> - Disconnection of fuel injector Cylinder 1 - Disconnection of fuel injector Cylinder 2 - Disconnection of fuel injector Cylinder 3 - Disconnection of fuel injector Cylinder 4 - Fuel pump relay - Engine for reg. throttle valve - Main relay - air conditioner compressor relay - Container valve - Engine management system error lights - Inlet camshaft timing control (bank 1) - Exhaust camshaft timing control (bank 1) - Immobilizer control lamp - Speed control light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Radiator fan high speed - Radiator fan: low speed - Oxygen sensor heating, sensor 1 - Oxygen sensor heating, sensor 2 - Variable intake system solenoid valve
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - solenoid valve, converter clutch - Engine revolution - switch, brakes - Oil temperature sensor gear box - Inserted gear - throttle valve angle - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D

Gear box control
6-gears automatic transmission HIVEC 5.7

- Solenoid switch valve E
- transmission ratio
- Acceleration pedal position sensor
- Current gear
- Gearbox input speed
- Transmission output speed
- Sport switch
- Engine torque
- Automatic pressure control solenoid A
- Sportronic switch upshift
- Sportronic switch downshift
- Torque converter-slip speed
- Torque converter clutch status
- Solenoid switch valve F
- Transmission control fault lamp

• **Actuators**

- Pressure-regulation magnetic valve
- Torque converter clutch solenoid valve
- Solenoid shift valve A
- Solenoid shift valve B
- Solenoid shift valve C
- Solenoid shift valve D
- Solenoid shift valve E
- Solenoid shift valve F (A)

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Control unit reset

• **Error memory**

• **Current values**

- Air compressor pressure signal
- Air compressor request
- Power supply
- Vehicle driving speed
- Oxygen sensor, bank 1
- Coolant temperature
- Battery voltage
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- fuel correction (bank 1)
- Knock sensor 1 (bank 1)
- switch steering wheel servo
- Main relay
- Throttle valve angle, potentiometer path 1
- Throttle valve angle, potentiometer path 2
- Intake air temperature
- Throttle valve signal
- Ignition
- Battery voltage activation
- Throttle valve position sensor 1
- Throttle valve position sensor 2
- Oxygen sensor bank 1, sensor 1)
- Oxygen sensor (bank 1, sensor 2)
- Pulse-duty factor, exhausted gases valve

actuator

- Wiper switch
- Headlights
- Engine operation detected
- Clutch pedal switch
- intake manifold pressure sensor
- Pulse duty factor, intake manifold valve
- Ambient pressure
- MIL-Status

2011/03

G4KD

2.0

165

Engine control
Theta 2.2

- Switch identification
 - Throttle valves servo motor control
 - Idle running speed target value
 - Gas pedal position sensor 1 Voltage
 - Gas pedal position sensor 2 Voltage
 - Ignition angle Cylinder 1
 - Ignition angle Cylinder 2
 - Ignition angle Cylinder 3
 - Ignition angle Cylinder 4
 - Fuel evaporation control valve, spray rate
 - Short-term mix. correction B1 (OBD)
 - Lambda target value
 - Lambda actual value
 - Air conditioner pressure sensor voltage
 - harmful for catalytic converter lack of combustion cylinder 1
 - harmful for catalytic converter lack of combustion cylinder 2
 - harmful for catalytic converter lack of combustion cylinder 3
 - harmful for catalytic converter lack of combustion cylinder 4
 - Cruise control indicator lamp CRUISE
 - Cruise control indicator lamp SET
 - Battery charging status
 - Lambda probe heating resistance (B1, S1)
 - Lambda probe heating resistance (B1, S2)
 - Air conditioner compressor control
 - Brake test switch
 - Oxygen sensor bank 1, sensor 1)
 - Oxygen sensor bank 2, sensor 1)
 - Cooling agent temperature voltage
 - Turbine wheel speed
 - Cruise control switch status
 - Cruise control on/off switch
 - Engine speed actual value
 - Inlet camsh. timing control status
 - Kilometer reading at MIL activation
 - Gas pedal position
 - Cylinder 1 knock sensor ZW correction
 - Cylinder 2 knock sensor ZW correction
 - Cylinder 3 knock sensor ZW correction
 - Cylinder 4 knock sensor ZW correction
 - Telephone antenna signal strength
 - Cruise control switch signal voltage
 - Control unit sensor voltage 4
 - Engine operating mode
 - Generator charge signal
 - Heated catalyst enabled
 - Mileage since fault memory cleared
 - Electric fuel pump control unit actuation
 - Battery state
 - Inlet camshaft control test (b1): result
 - Exhaust camshaft adjustment test B1: Result
 - Diagnostic connector VIM status
 - Intake air temperature on engine start
 - Time since ignition ON
 - Exhaust system injection PWM signal
 - Short-term oxygen sensor control adjustment
- B1
- Throttle valve position: closed
 - Alternator load signal filtered raw value
 - Transmission oil temperature: calculated
 - AC start/stop authorization
 - Fan high speed
 - Fan low speed
 - Right overheating protection control unit
 - Inlet camshaft reset valve B1

					<ul style="list-style-type: none"> - Exhaust camshaft reset valve B1 - Battery temperature - Battery capacity - Battery discharge status - Intake air temperature sensor voltage - Throttle valve position: Full load - PWM Generator - Camshaft / Crankshaft synchronization - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Control unit sensor voltage 3 - Voltage intake air pressure sensor - Coolant temp. at engine start - Lambda control loop monitoring - Fresh air blower, maximum speed - Battery charge/discharge current - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 - Var. valve timing press. switch/exh. - Sensor reference voltage 1 - Sensor reference voltage 2 - Part load status <p>• Actuators</p> <ul style="list-style-type: none"> - Disconnection of fuel injector Cylinder 1 - Disconnection of fuel injector Cylinder 2 - Disconnection of fuel injector Cylinder 3 - Disconnection of fuel injector Cylinder 4 - Fuel pump relay - Engine for reg. throttle valve - Main relay - air conditioner compressor relay - Container valve - Engine management system error lights - Inlet camshaft timing control (bank 1) - Exhaust camshaft timing control (bank 1) - Immobilizer control lamp - Speed control light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Radiator fan high speed - Radiator fan: low speed - Oxygen sensor heating, sensor 1 - Oxygen sensor heating, sensor 2 - Variable intake system solenoid valve
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KIA					K5 - K5 2.4 GDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - solenoid valve, converter clutch - Engine revolution - switch, brakes - Oil temperature sensor gear box 	

2010/05 -	Theta II 2.4 GDI	2.4	201	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> - Inserted gear - throttle valve angle - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Current gear - Gearbox input speed - Transmission output speed - Sport switch - Engine torque - Automatic pressure control solenoid A - Sportronic switch upshift - Sportronic switch downshift - Torque converter-slip speed - Torque converter clutch status - Solenoid switch valve F - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure-regulation magnetic valve - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D - Solenoid shift valve E - Solenoid shift valve F (A)
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KIA K5 - K5 2.0 LPI					
Year	Engine	Liters	HP	System	Functions
2010/05 -	Theta II 2.0 LPI	2.0	144	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - solenoid valve, converter clutch - Engine revolution - switch, brakes - Oil temperature sensor gear box - Inserted gear - throttle valve angle - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Current gear - Gearbox input speed - Transmission output speed - Sport switch - Engine torque - Automatic pressure control solenoid A - Sportronic switch upshift - Sportronic switch downshift - Torque converter-slip speed - Torque converter clutch status - Solenoid switch valve F - Transmission control fault lamp

					<ul style="list-style-type: none"> • Actuators - Pressure-regulation magnetic valve - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D - Solenoid shift valve E - Solenoid shift valve F (A)
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KIA					
K5 - K5 2.0 Turbo GDI					
Year	Engine	Liters	HP	System	Functions
2011/07 -	Theta II 2.0 GDI	2.0	271	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - solenoid valve, converter clutch - Engine revolution - switch, brakes - Oil temperature sensor gear box - Inserted gear - throttle valve angle - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Current gear - Gearbox input speed - Transmission output speed - Sport switch - Engine torque - Automatic pressure control solenoid A - Sportronic switch upshift - Sportronic switch downshift - Torque converter-slip speed - Torque converter clutch status - Solenoid switch valve F - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure-regulation magnetic valve - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D - Solenoid shift valve E - Solenoid shift valve F (A)

KIA					
Lotze - Lotze 2.0 VGT CRDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values

2006/05 -	2.0	194	Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for overdrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Converter slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - Press. build-up/reduc. solenoid valve - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Torque converter clutch solenoid valve - Gear indicator lamp D1 - Gear indicator lamp D2 - Gear indicator lamp D3 - Gear indicator lamp D4 - Gear indicator lamp D5
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KIA Lotze - Lotze 1.8i CVVT					
Year	Engine	Liters	HP	System	Functions
2005/08 -		1.8	133	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve

KIA Lotze - Lotze 2.0i CVVT					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear

2005/08 -	2.0	144	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
			Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset

- **Error memory**

- **Current values**

- Throttle valve position (bank 2)
- Voltage, throttle valve position sensor
- Vehicle driving speed
- Coolant temperature sensor voltage
- Contact switch
- Fuel pump relay
- Coolant temperature
- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3

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CVVT

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Engine control
Theta 2.0

- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption,

cylinder 1

- Knock detonation, offset adjustment adaption,

cylinder 2

- Knock detonation, offset adjustment adaption,

cylinder 3

- Knock detonation, offset adjustment adaption,

cylinder 4

- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position

• **Actuators**

- Fuel pump relay
- Signal lamp for representing defect, engine

control

- Engine for reg. throttle valve
- Injector (cylinder 1)
- Injector (cylinder 2)
- Injector (cylinder 4)
- Injector (cylinder 4)
- solenoid A turbo pressure restriction
- fuel tank evaporation/regeneration valve
- Main relay
- air conditioner compressor relay
- Exhaust camsh.control sol. valve
- Intake camshaft control, solenoid valve
- Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> - Lambda probe heating (B1, S1) - Lambda probe heating (B1, S2) - Immobilizer, warning light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
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KIA	Lotze - Lotze 2.4i CVT
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Year	Engine	Liters	HP	System	Functions
2005/08 -		2.4	166	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position

Gear box control
HIVEC 2.1

- Switch idle mode
- Magnetic valve for reverse gear lock
- Engine revolution
- switch, brakes
- engine torque
- cruise control switch
- gear box oil temperature
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- Transmission output speed
- Automatic transmission power supply
- Convertor slip rotating speed
- Magnetic valve for crawling speed
- solenoid brake band
- Mode switch Hold
- AT-air control magnetic valve
- Brake tape reduction magnetic valve
- **Actuators**
 - Magnetic valve for reverse gear lock
 - Solenoid valve: direct gear direct gear
 - Magnetic valve for crawling speed
 - solenoid brake band
 - Magnetic valve for cruising gear
 - Power supply relay
 - Brake tape reduction magnetic valve

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
- **Error memory**
- **Current values**
 - Throttle valve position (bank 2)
 - Voltage, throttle valve position sensor
 - Vehicle driving speed
 - Coolant temperature sensor voltage
 - Contact switch
 - Fuel pump relay
 - Coolant temperature
 - Pulse-duty factor, fuel tank ventilation valve
 - Input air quantity meter
 - Throttle valve position sensor
 - Idle regulator
 - signal, throttle valve
 - Engine revolution
 - engine loading
 - stop lights switch
 - Knock control, cylinder 1
 - Knock control, cylinder 2
 - Knock control, cylinder 3
 - Knock control, cylinder 4
 - idle signal
 - intake manifold pressure
 - turbo charger pressure
 - Air conditioner compressor relay
 - air quantity
 - Clutch switch
 - recommended idle revolutions
 - start signal
 - Immobilizer
 - Fuel shut-off solenoid valve
 - fuel tank evaporation/regeneration valve

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CVVT

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- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch

Engine control
Theta 2.0

- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON
- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization

					<ul style="list-style-type: none"> - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Inlet camshaft timing control, duty cycle - Exhaust camshaft timing control, duty cycle - Fuel level sensor - Intake air pressure - Voltage intake air pressure sensor - Coolant temp. at engine start - Camshaft adjustment key combination - Turbo charger bypass valve - Throttle valve sensor reference voltage - Throttle valve fully closed - Long-term additive mixture correct. - Long-term multiplic. mixture correc. - Battery charge/discharge current - Battery current sensor voltage - Exhaust camshaft control position - Inlet camshaft control position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Signal lamp for representing defect, engine control - Engine for reg. throttle valve - Injector (cylinder 1) - Injector (cylinder 2) - Injector (cylinder 4) - Injector (cylinder 4) - solenoid A turbo pressure restriction - fuel tank evaporation/regeneration valve - Main relay - air conditioner compressor relay - Exhaust camsh.control sol. valve - Intake camshaft control, solenoid valve - Switchable intake manifold, solenoid valve - Lambda probe heating (B1, S1) - Lambda probe heating (B1, S2) - Immobilizer, warning light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
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KIA						Lotze - Lotze 2.0 LPI					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes 					

2005/08 -	I4	2.0	115	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
2008/06 -	I4 Theta CVVT	2.0	140	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve

KIA Magentis - Magentis 2.5i					
Year	Engine	Liters	HP	System	Functions
2000/09 - 2005/12	G6BV	2.5	169	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve

KIA Mohave - Mohave 3.0 CRDi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Neutral position initialization • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Accelerator pedal position - Switch idle mode - Engine revolution - switch, brakes - gear box oil temperature - transmission ratio - Tiptronic switch: lower gear engagement

2009/01 -		3.0	250	Gear box control 6-gears automatic transmission HIVEC 5.3	<ul style="list-style-type: none"> - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Transmission - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Engine torque - Transmission selector lever position - Converter slip rotating speed - Switch magnetic valve C monitoring - Solenoid valve: fuel-line pressure - Solenoid valve: Pipe pressure, monitoring - Solenoid valve: Torque converter lock-up clutch - SV: TC lock-up clutch, monitoring - Fault codes count - Current switch magnetic valve C - Solenoid shift valve D current - Solenoid shift valve E current - Solenoid shift valve F current - Solenoid shift valve D monitoring - Solenoid shift valve E monitoring - Solenoid shift valve F monitoring • Actuators <ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - Solenoid valve: fuel-line pressure - Solenoid switch valve F - Torque converter clutch solenoid valve
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KIA Optima [TF] - Optima 1.7 CRDi					
Year	Engine	Liters	HP	System	Functions
2011/09 -	D4FD	1.7	136 - 140	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - solenoid valve, converter clutch - Engine revolution - switch, brakes - Oil temperature sensor gear box - Inserted gear - throttle valve angle - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Current gear - Gearbox input speed - Transmission output speed - Sport switch - Engine torque - Automatic pressure control solenoid A - Sportronic switch upshift - Sportronic switch downshift - Torque converter-slip speed - Torque converter clutch status - Solenoid switch valve F

					<ul style="list-style-type: none"> - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure-regulation magnetic valve - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D - Solenoid shift valve E - Solenoid shift valve F (A)
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KIA Optima [TF] - Optima 2.0					
Year	Engine	Liters	HP	System	Functions
2012/03 -	G4NA	2.0	165 - 170	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - solenoid valve, converter clutch - Engine revolution - switch, brakes - Oil temperature sensor gear box - Inserted gear - throttle valve angle - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Current gear - Gearbox input speed - Transmission output speed - Sport switch - Engine torque - Automatic pressure control solenoid A - Sportronic switch upshift - Sportronic switch downshift - Torque converter-slip speed - Torque converter clutch status - Solenoid switch valve F - Transmission control fault lamp • Actuators <ul style="list-style-type: none"> - Pressure-regulation magnetic valve - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D - Solenoid shift valve E - Solenoid shift valve F (A)

KIA Optima [TF] - Optima 2.4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory

2012/03 -	G4KE	2.4	178 - 180	Gear box control 6-gears automatic transmission HIVEC 5.7	<ul style="list-style-type: none"> • Current values - Vehicle driving speed - solenoid valve, converter clutch - Engine revolution - switch, brakes - Oil temperature sensor gear box - Inserted gear - throttle valve angle - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - Solenoid switch valve E - transmission ratio - Acceleration pedal position sensor - Current gear - Gearbox input speed - Transmission output speed - Sport switch - Engine torque - Automatic pressure control solenoid A - Sportronic switch upshift - Sportronic switch downshift - Torque converter-slip speed - Torque converter clutch status - Solenoid switch valve F - Transmission control fault lamp • Actuators - Pressure-regulation magnetic valve - Torque converter clutch solenoid valve - Solenoid shift valve A - Solenoid shift valve B - Solenoid shift valve C - Solenoid shift valve D - Solenoid shift valve E - Solenoid shift valve F (A)
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KIA					
Pride New - Pride New 1.5 VGT CRDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset • Error memory • Current values - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed

2005/05 -		1.5	152	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Rondo - Rondo 2.4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position (bank 2) - Voltage, throttle valve position sensor - Vehicle driving speed - Coolant temperature sensor voltage - Contact switch - Fuel pump relay - Coolant temperature - Pulse-duty factor, fuel tank ventilation valve - Input air quantity meter - Throttle valve position sensor - Idle regulator - signal, throttle valve - Engine revolution - engine loading - stop lights switch - Knock control, cylinder 1 - Knock control, cylinder 2 - Knock control, cylinder 3 - Knock control, cylinder 4 - idle signal - intake manifold pressure - turbo charger pressure - Air conditioner compressor relay - air quantity - Clutch switch

- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank
- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2

2006/09 - 2008/08	DOHC	2.4	164	Engine control Theta 2.0	<ul style="list-style-type: none"> - harmful for catalytic converter lack of combustion cylinder 3 - harmful for catalytic converter lack of combustion cylinder 4 - Air conditioner switch - Air conditioner status - Catalytic converter heating status - test - Oxygen sensor heater (bank 1, sensor 1) - Oxygen sensor heater (bank 1, sensor 2) - transmission type coding - Brake test switch - Intake camshaft position actual value - Cooling agent pressure - Intake camshaft adjustment, set angle - Calculated cooling agent temperature - Metered engine oil temperature - Fuel level signal 2 - Atmospheric pressure voltage sensor - Camshaft control - Charging-air pressure sensor voltage - Intake camshaft control, adaptation - Status electronic fuel pump - Lambda adaption status: Idle - Inlet camsh. timing control status - Exhaust camsh. timing contr. status - Atmospheric pressure sensor - Kilometer reading at MIL activation - Mileage in km on last maintenance - Power steering pressure - Magnetic valve camshaft adjustment - Torque converter-slip speed - Knock sensor test - A/C compressor status - Overtemperature protection - Alternator torque request - Throttle valve motor duty cycle 1 - Battery status - Requested specified idling speed - Lambda sensor adaptation: Current timer offset - Knock detonation, offset adjustment adaption, cylinder 1 - Knock detonation, offset adjustment adaption, cylinder 2 - Knock detonation, offset adjustment adaption, cylinder 3 - Knock detonation, offset adjustment adaption, cylinder 4 - Intake air temperature on engine start - Time since ignition ON - Throttle valve angle: set value - Battery ageing - Lambda control (b1): Part load adaptation value - Variable tract intake manifold status - Alternator monitoring deactivation by wiper - Alternator monitoring deactivation by blower - Alternator monitoring deactivation by headlights - Battery temperature - Oxygen sensor status (B1, S1) - Oxygen sensor status (B1, S2) - Fuel shutoff status - PWM turbo charger bypass valve - Fuel tank pressure control valve - Throttle valve position - Lambda control status - Battery capacity - Intake air temperature sensor voltage - Throttle valve position: Full load
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					<ul style="list-style-type: none"> - PWM Generator - Auxiliary battery status - Throttle valve position 1 - Throttle valve position 2 - Camshaft / Crankshaft synchronization - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Inlet camshaft timing control, duty cycle - Exhaust camshaft timing control, duty cycle - Fuel level sensor - Intake air pressure - Voltage intake air pressure sensor - Coolant temp. at engine start - Camshaft adjustment key combination - Turbo charger bypass valve - Throttle valve sensor reference voltage - Throttle valve fully closed - Long-term additive mixture correct. - Long-term multiplic. mixture correc. - Battery charge/discharge current - Battery current sensor voltage - Exhaust camshaft control position - Inlet camshaft control position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Signal lamp for representing defect, engine control - Engine for reg. throttle valve - Injector (cylinder 1) - Injector (cylinder 2) - Injector (cylinder 4) - Injector (cylinder 4) - solenoid A turbo pressure restriction - fuel tank evaporation/regeneration valve - Main relay - air conditioner compressor relay - Exhaust camsh.control sol. valve - Intake camshaft control, solenoid valve - Switchable intake manifold, solenoid valve - Lambda probe heating (B1, S1) - Lambda probe heating (B1, S2) - Immobilizer, warning light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Variable intake valves control - Fuel evaporation cut-off valve - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Throttle valve position (bank 2) - Voltage, throttle valve position sensor - Vehicle driving speed - Coolant temperature sensor voltage - Contact switch - Fuel pump relay - Coolant temperature

- Pulse-duty factor, fuel tank ventilation valve
- Input air quantity meter
- Throttle valve position sensor
- Idle regulator
- signal, throttle valve
- Engine revolution
- engine loading
- stop lights switch
- Knock control, cylinder 1
- Knock control, cylinder 2
- Knock control, cylinder 3
- Knock control, cylinder 4
- idle signal
- intake manifold pressure
- turbo charger pressure
- Air conditioner compressor relay
- air quantity
- Clutch switch
- recommended idle revolutions
- start signal
- Immobilizer
- Fuel shut-off solenoid valve
- fuel tank evaporation/regeneration valve
- Servo steering wheel pressure sensor
- system power supply
- detonations signal
- switch steering wheel servo
- Main relay
- engine oil temperature
- Lambda compensation
- Adaptation idle regulator
- stop lights switch
- Intake air temperature
- Fan 1 control
- Fan 2 control
- Battery voltage activation
- Throttle valve position sensor 1
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Throttle valve position sensor 2
- Misfire, cylinder 1
- Misfire, cylinder 2
- Misfire, cylinder 3
- Misfire, cylinder 4
- Adjust. idle
- Accumulation time, ignition coil cylinder 1
- Accumulation time, ignition coil cylinder 2
- Accumulation time, ignition coil cylinder 3
- Accumulation time, ignition coil cylinder 4
- Oxygen sensor heater (bank 1/2, sensor 1)
- Oxygen sensor heater (bank 1/2, sensor 2)
- Short-term mixture correction, bank 1
- O2 sens. heat. (B1, S1) heat. time
- Oxygen sensor heating (bank 1, sensor 2), heating time
- Stopping valve, fuel evaporation system
- Injection time, cylinder 1
- Injection time, cylinder 2
- Injection time, cylinder 3
- Injection time, cylinder 4
- Engine operation detected
- Cooling agent pressure sensor
- intake manifold pressure sensor
- MIL-Status
- Coolant temperature sensor, primary
- Coolant temperature sensor, secondary
- Gas pedal position sensor (%)
- Fuel level in the tank

2008/09
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DOHC

2.4

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Engine control
Theta 2.0

- Throttle valves servo motor control
- Throttle valve servo motor position
- Cooling agent temperature motor
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Ignition angle Cylinder 1
- Camshaft intake valves (bank 1), resultant value
- Camshaft exhaust valves (bank 1), actual value
- Camshaft exhaust valves (bank 1), resultant value
- Outdoor temperature sensor voltage
- Transmission, specified torque
- Lambda target value
- Lambda actual value
- harmful for catalytic converter lack of combustion cylinder 1
- harmful for catalytic converter lack of combustion cylinder 2
- harmful for catalytic converter lack of combustion cylinder 3
- harmful for catalytic converter lack of combustion cylinder 4
- Air conditioner switch
- Air conditioner status
- Catalytic converter heating status
- test
- Oxygen sensor heater (bank 1, sensor 1)
- Oxygen sensor heater (bank 1, sensor 2)
- transmission type coding
- Brake test switch
- Intake camshaft position actual value
- Cooling agent pressure
- Intake camshaft adjustment, set angle
- Calculated cooling agent temperature
- Metered engine oil temperature
- Fuel level signal 2
- Atmospheric pressure voltage sensor
- Camshaft control
- Charging-air pressure sensor voltage
- Intake camshaft control, adaptation
- Status electronic fuel pump
- Lambda adaption status: Idle
- Inlet camsh. timing control status
- Exhaust camsh. timing contr. status
- Atmospheric pressure sensor
- Kilometer reading at MIL activation
- Mileage in km on last maintenance
- Power steering pressure
- Magnetic valve camshaft adjustment
- Torque converter-slip speed
- Knock sensor test
- A/C compressor status
- Overtemperature protection
- Alternator torque request
- Throttle valve motor duty cycle 1
- Battery status
- Requested specified idling speed
- Lambda sensor adaptation: Current timer offset
- Knock detonation, offset adjustment adaption, cylinder 1
- Knock detonation, offset adjustment adaption, cylinder 2
- Knock detonation, offset adjustment adaption, cylinder 3
- Knock detonation, offset adjustment adaption, cylinder 4
- Intake air temperature on engine start
- Time since ignition ON

- Throttle valve angle: set value
- Battery ageing
- Lambda control (b1): Part load adaptation value
- Variable tract intake manifold status
- Alternator monitoring deactivation by wiper
- Alternator monitoring deactivation by blower
- Alternator monitoring deactivation by headlights
- Battery temperature
- Oxygen sensor status (B1, S1)
- Oxygen sensor status (B1, S2)
- Fuel shutoff status
- PWM turbo charger bypass valve
- Fuel tank pressure control valve
- Throttle valve position
- Lambda control status
- Battery capacity
- Intake air temperature sensor voltage
- Throttle valve position: Full load
- PWM Generator
- Auxiliary battery status
- Throttle valve position 1
- Throttle valve position 2
- Camshaft / Crankshaft synchronization
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Inlet camshaft timing control, duty cycle
- Exhaust camshaft timing control, duty cycle
- Fuel level sensor
- Intake air pressure
- Voltage intake air pressure sensor
- Coolant temp. at engine start
- Camshaft adjustment key combination
- Turbo charger bypass valve
- Throttle valve sensor reference voltage
- Throttle valve fully closed
- Long-term additive mixture correct.
- Long-term multiplic. mixture correc.
- Battery charge/discharge current
- Battery current sensor voltage
- Exhaust camshaft control position
- Inlet camshaft control position
- **Actuators**
 - Fuel pump relay
 - Signal lamp for representing defect, engine control
 - Engine for reg. throttle valve
 - Injector (cylinder 1)
 - Injector (cylinder 2)
 - Injector (cylinder 4)
 - Injector (cylinder 4)
 - solenoid A turbo pressure restriction
 - fuel tank evaporation/regeneration valve
 - Main relay
 - air conditioner compressor relay
 - Exhaust camsh.control sol. valve
 - Intake camshaft control, solenoid valve
 - Switchable intake manifold, solenoid valve
 - Lambda probe heating (B1, S1)
 - Lambda probe heating (B1, S2)
 - Immobilizer, warning light
 - Ignition coil Cylinder 1
 - Ignition coil Cylinder 2
 - Ignition coil Cylinder 3
 - Ignition coil Cylinder 4
 - Variable intake valves control
 - Fuel evaporation cut-off valve

					<ul style="list-style-type: none"> - Radiator fan high speed - Radiator fan: low speed - Camshaft adjustment solenoid valve - Turbo charger bypass valve
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KIA Sedona - Sedona 3.8i					
Year	Engine	Liters	HP	System	Functions
2005/09 -		3.8	254	Gear box control 5-gears automatic transmission HIVEC 4.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - Solenoid valve 1/reverse-gear locking - Engine revolution - gear box oil temperature - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Electronic control unit supply voltage - Gear lever position - Gearbox input speed - Transmission output speed - Engine torque - Converter slip rotating speed - Magnetic valve for crawling speed - Shut-off solenoid valve 2/4 - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 • Actuators <ul style="list-style-type: none"> - Solenoid valve 1/reverse-gear locking - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Shut-off solenoid valve 2/4

KIA Sorento - Sorento 2.5 VGT CRDi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Engine revolution - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement

2005/02 -		2.5	174	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - CAN communication - Brake pedal switch - Gear lever position - Transmission output speed - Transmission indication - Converter slip rotating speed - Start inhibit switch 1 - Start inhibit switch 2 - Start inhibit switch 3 - Start inhibit switch 4 - Gearbox oil temperature 1 - Gearbox oil temperature 2 - Backup lights - Oil pressure switch 6 - Oil pressure switch 5 - Oil pressure switch 3 - Oil pressure switch 2 - Oil pressure switch 1 - Solenoid valve: Torque converter lock-up clutch, monitoring - Solenoid valve: fuel-line pressure - Solenoid valve: Pipe pressure, monitoring - Input clutch, solenoid - Solenoid valve: Input clutch, monitoring - Solenoid valve: Front wheel brake - Solenoid valve: front brake, monitoring - Solenoid valve: Torque converter lock-up clutch - SV: TC lock-up clutch, monitoring - Solenoid valve: Reverse clutch - Solenoid valve: reverse clutch, monitoring
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KIA Sorento - Sorento 3.8					
Year	Engine	Liters	HP	System	Functions
2006/09 - 2008/08	Lambda V6	3.8	267	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Engine revolution - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - CAN communication - Brake pedal switch - Gear lever position - Transmission output speed - Transmission indication - Converter slip rotating speed - Start inhibit switch 1 - Start inhibit switch 2 - Start inhibit switch 3 - Start inhibit switch 4 - Gearbox oil temperature 1 - Gearbox oil temperature 2 - Backup lights - Oil pressure switch 6 - Oil pressure switch 5 - Oil pressure switch 3 - Oil pressure switch 2

					<ul style="list-style-type: none"> - Oil pressure switch 1 - Solenoid valve: Torque converter lock-up clutch, monitoring - Solenoid valve: fuel-line pressure - Solenoid valve: Pipe pressure, monitoring - Input clutch, solenoid - Solenoid valve: Input clutch, monitoring - Solenoid valve: Front wheel brake - Solenoid valve: front brake, monitoring - Solenoid valve: Torque converter lock-up clutch - SV: TC lock-up clutch, monitoring - Solenoid valve: Reverse clutch - Solenoid valve: reverse clutch, monitoring
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KIA Sorento [JC] - Sorento 2.5 CRDi

Year	Engine	Liters	HP	System	Functions
2002/07 - 2009/08	D4CB	2.5	140	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Engine revolution - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - CAN communication - Brake pedal switch - Gear lever position - Transmission output speed - Transmission indication - Convertor slip rotating speed - Start inhibit switch 1 - Start inhibit switch 2 - Start inhibit switch 3 - Start inhibit switch 4 - Gearbox oil temperature 1 - Gearbox oil temperature 2 - Backup lights - Oil pressure switch 6 - Oil pressure switch 5 - Oil pressure switch 3 - Oil pressure switch 2 - Oil pressure switch 1 - Solenoid valve: Torque converter lock-up clutch, monitoring - Solenoid valve: fuel-line pressure - Solenoid valve: Pipe pressure, monitoring - Input clutch, solenoid - Solenoid valve: Input clutch, monitoring - Solenoid valve: Front wheel brake - Solenoid valve: front brake, monitoring - Solenoid valve: Torque converter lock-up clutch - SV: TC lock-up clutch, monitoring - Solenoid valve: Reverse clutch - Solenoid valve: reverse clutch, monitoring
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory

2006/03 - 2009/08	D4CB	2.5	170	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> • Current values - Vehicle driving speed - Engine revolution - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - CAN communication - Brake pedal switch - Gear lever position - Transmission output speed - Transmission indication - Convertor slip rotating speed - Start inhibit switch 1 - Start inhibit switch 2 - Start inhibit switch 3 - Start inhibit switch 4 - Gearbox oil temperature 1 - Gearbox oil temperature 2 - Backup lights - Oil pressure switch 6 - Oil pressure switch 5 - Oil pressure switch 3 - Oil pressure switch 2 - Oil pressure switch 1 - Solenoid valve: Torque converter lock-up clutch, monitoring - Solenoid valve: fuel-line pressure - Solenoid valve: Pipe pressure, monitoring - Input clutch, solenoid - Solenoid valve: Input clutch, monitoring - Solenoid valve: Front wheel brake - Solenoid valve: front brake, monitoring - Solenoid valve: Torque converter lock-up clutch - SV: TC lock-up clutch, monitoring - Solenoid valve: Reverse clutch - Solenoid valve: reverse clutch, monitoring
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KIA Sorento [JC] - Sorento 3.5i					
Year	Engine	Liters	HP	System	Functions
2003/03 - 2009/08	G6CU	3.5	195	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset • Error memory • Current values - Vehicle driving speed - Engine revolution - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - CAN communication - Brake pedal switch - Gear lever position - Transmission output speed - Transmission indication - Convertor slip rotating speed - Start inhibit switch 1 - Start inhibit switch 2 - Start inhibit switch 3 - Start inhibit switch 4 - Gearbox oil temperature 1

					<ul style="list-style-type: none"> - Gearbox oil temperature 2 - Backup lights - Oil pressure switch 6 - Oil pressure switch 5 - Oil pressure switch 3 - Oil pressure switch 2 - Oil pressure switch 1 - Solenoid valve: Torque converter lock-up clutch, monitoring - Solenoid valve: fuel-line pressure - Solenoid valve: Pipe pressure, monitoring - Input clutch, solenoid - Solenoid valve: Input clutch, monitoring - Solenoid valve: Front wheel brake - Solenoid valve: front brake, monitoring - Solenoid valve: Torque converter lock-up clutch - SV: TC lock-up clutch, monitoring - Solenoid valve: Reverse clutch - Solenoid valve: reverse clutch, monitoring
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KIA	Sorento [JC] - Sorento 3.8i
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Year	Engine	Liters	HP	System	Functions
2006/12 - 2008/08	G6DA	3.8	267	Gear box control 5-gears automatic transmission HIVEC 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Engine revolution - gears engagement control - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - CAN communication - Brake pedal switch - Gear lever position - Transmission output speed - Transmission indication - Convertor slip rotating speed - Start inhibit switch 1 - Start inhibit switch 2 - Start inhibit switch 3 - Start inhibit switch 4 - Gearbox oil temperature 1 - Gearbox oil temperature 2 - Backup lights - Oil pressure switch 6 - Oil pressure switch 5 - Oil pressure switch 3 - Oil pressure switch 2 - Oil pressure switch 1 - Solenoid valve: Torque converter lock-up clutch, monitoring - Solenoid valve: fuel-line pressure - Solenoid valve: Pipe pressure, monitoring - Input clutch, solenoid - Solenoid valve: Input clutch, monitoring - Solenoid valve: Front wheel brake - Solenoid valve: front brake, monitoring - Solenoid valve: Torque converter lock-up clutch - SV: TC lock-up clutch, monitoring - Solenoid valve: Reverse clutch - Solenoid valve: reverse clutch, monitoring

KIA Sorento [XM] - Sorento 2.4

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Control unit reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor pressure signal - Air compressor request - Power supply - Vehicle driving speed - Oxygen sensor, bank 1 - Coolant temperature - Battery voltage - stop lights switch - Knock control, cylinder 1 - Knock control, cylinder 2 - Knock control, cylinder 3 - Knock control, cylinder 4 - fuel correction (bank 1) - Knock sensor 1 (bank 1) - switch steering wheel servo - Main relay - Throttle valve angle, potentiometer path 1 - Throttle valve angle, potentiometer path 2 - Intake air temperature - Throttle valve signal - Ignition - Battery voltage activation - Throttle valve position sensor 1 - Throttle valve position sensor 2 - Oxygen sensor bank 1, sensor 1) - Oxygen sensor (bank 1, sensor 2) - Pulse-duty factor, exhausted gases valve actuator - Wiper switch - Headlights - Engine operation detected - Clutch pedal switch - intake manifold pressure sensor - Pulse duty factor, intake manifold valve - Ambient pressure - MIL-Status - Switch identification - Throttle valves servo motor control - Idle running speed target value - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Ignition angle Cylinder 1 - Ignition angle Cylinder 2 - Ignition angle Cylinder 3 - Ignition angle Cylinder 4 - Fuel evaporation control valve, spray rate - Short-term mix. correction B1 (OBD) - Lambda target value - Lambda actual value - Air conditioner pressure sensor voltage - harmful for catalytic converter lack of combustion cylinder 1 - harmful for catalytic converter lack of combustion cylinder 2 - harmful for catalytic converter lack of

2009/09

G4KE

2.4

174

Engine control
Theta 2.2

- combustion cylinder 3
 - harmful for catalytic converter lack of
- combustion cylinder 4
 - Cruise control indicator lamp CRUISE
 - Cruise control indicator lamp SET
 - Battery charging status
 - Lambda probe heating resistance (B1, S1)
 - Lambda probe heating resistance (B1, S2)
 - Air conditioner compressor control
 - Brake test switch
 - Oxygen sensor bank 1, sensor 1)
 - Oxygen sensor bank 2, sensor 1)
 - Cooling agent temperature voltage
 - Turbine wheel speed
 - Cruise control switch status
 - Cruise control on/off switch
 - Engine speed actual value
 - Inlet camsh. timing control status
 - Kilometer reading at MIL activation
 - Gas pedal position
 - Cylinder 1 knock sensor ZW correction
 - Cylinder 2 knock sensor ZW correction
 - Cylinder 3 knock sensor ZW correction
 - Cylinder 4 knock sensor ZW correction
 - Telephone antenna signal strength
 - Cruise control switch signal voltage
 - Control unit sensor voltage 4
 - Engine operating mode
 - Generator charge signal
 - Heated catalyst enabled
 - Mileage since fault memory cleared
 - Electric fuel pump control unit actuation
 - Battery state
 - Inlet camshaft control test (b1): result
 - Exhaust camshaft adjustment test B1: Result
 - Diagnostic connector VIM status
 - Intake air temperature on engine start
 - Time since ignition ON
 - Exhaust system injection PWM signal
 - Short-term oxygen sensor control adjustment
- B1
 - Throttle valve position: closed
 - Alternator load signal filtered raw value
 - Transmission oil temperature: calculated
 - AC start/stop authorization
 - Fan high speed
 - Fan low speed
 - Right overheating protection control unit
 - Inlet camshaft reset valve B1
 - Exhaust camshaft reset valve B1
 - Battery temperature
 - Battery capacity
 - Battery discharge status
 - Intake air temperature sensor voltage
 - Throttle valve position: Full load
 - PWM Generator
 - Camshaft / Crankshaft synchronization
 - Missfire detection counter Cylinder 1
 - Missfire detection counter Cylinder 2
 - Missfire detection counter Cylinder 3
 - Missfire detection counter Cylinder 4
 - Control unit sensor voltage 3
 - Voltage intake air pressure sensor
 - Coolant temp. at engine start
 - Lambda control loop monitoring
 - Fresh air blower, maximum speed
 - Battery charge/discharge current
 - Injection time/cylinder 1

					<ul style="list-style-type: none"> - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 - Var. valve timing press. switch/exh. - Sensor reference voltage 1 - Sensor reference voltage 2 - Part load status • Actuators <ul style="list-style-type: none"> - Disconnection of fuel injector Cylinder 1 - Disconnection of fuel injector Cylinder 2 - Disconnection of fuel injector Cylinder 3 - Disconnection of fuel injector Cylinder 4 - Fuel pump relay - Engine for reg. throttle valve - Main relay - air conditioner compressor relay - Container valve - Engine management system error lights - Inlet camshaft timing control (bank 1) - Exhaust camshaft timing control (bank 1) - Immobilizer control lamp - Speed control light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Radiator fan high speed - Radiator fan: low speed - Oxygen sensor heating, sensor 1 - Oxygen sensor heating, sensor 2 - Variable intake system solenoid valve
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KIA Sorento [XM] - Sorento 2.4 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Control unit reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor pressure signal - Air compressor request - Power supply - Vehicle driving speed - Oxygen sensor, bank 1 - Coolant temperature - Battery voltage - stop lights switch - Knock control, cylinder 1 - Knock control, cylinder 2 - Knock control, cylinder 3 - Knock control, cylinder 4 - fuel correction (bank 1) - Knock sensor 1 (bank 1) - switch steering wheel servo - Main relay - Throttle valve angle, potentiometer path 1 - Throttle valve angle, potentiometer path 2 - Intake air temperature - Throttle valve signal - Ignition - Battery voltage activation - Throttle valve position sensor 1 - Throttle valve position sensor 2

2009/09 -	G4KE	2.4	174	Engine control Theta 2.2	<ul style="list-style-type: none"> - Oxygen sensor bank 1, sensor 1) - Oxygen sensor (bank 1, sensor 2) - Pulse-duty factor, exhausted gases valve actuator - Wiper switch - Headlights - Engine operation detected - Clutch pedal switch - intake manifold pressure sensor - Pulse duty factor, intake manifold valve - Ambient pressure - MIL-Status - Switch identification - Throttle valves servo motor control - Idle running speed target value - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Ignition angle Cylinder 1 - Ignition angle Cylinder 2 - Ignition angle Cylinder 3 - Ignition angle Cylinder 4 - Fuel evaporation control valve, spray rate - Short-term mix. correction B1 (OBD) - Lambda target value - Lambda actual value - Air conditioner pressure sensor voltage - harmful for catalytic converter lack of combustion cylinder 1 - harmful for catalytic converter lack of combustion cylinder 2 - harmful for catalytic converter lack of combustion cylinder 3 - harmful for catalytic converter lack of combustion cylinder 4 - Cruise control indicator lamp CRUISE - Cruise control indicator lamp SET - Battery charging status - Lambda probe heating resistance (B1, S1) - Lambda probe heating resistance (B1, S2) - Air conditioner compressor control - Brake test switch - Oxygen sensor bank 1, sensor 1) - Oxygen sensor bank 2, sensor 1) - Cooling agent temperature voltage - Turbine wheel speed - Cruise control switch status - Cruise control on/off switch - Engine speed actual value - Inlet camsh. timing control status - Kilometer reading at MIL activation - Gas pedal position - Cylinder 1 knock sensor ZW correction - Cylinder 2 knock sensor ZW correction - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - Telephone antenna signal strength - Cruise control switch signal voltage - Control unit sensor voltage 4 - Engine operating mode - Generator charge signal - Heated catalyst enabled - Mileage since fault memory cleared - Electric fuel pump control unit actuation - Battery state - Inlet camshaft control test (b1): result - Exhaust camshaft adjustment test B1: Result - Diagnostic connector VIM status - Intake air temperature on engine start
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					<ul style="list-style-type: none"> - Time since ignition ON - Exhaust system injection PWM signal - Short-term oxygen sensor control adjustment B1 <ul style="list-style-type: none"> - Throttle valve position: closed - Alternator load signal filtered raw value - Transmission oil temperature: calculated - AC start/stop authorization - Fan high speed - Fan low speed - Right overheating protection control unit - Inlet camshaft reset valve B1 - Exhaust camshaft reset valve B1 - Battery temperature - Battery capacity - Battery discharge status - Intake air temperature sensor voltage - Throttle valve position: Full load - PWM Generator - Camshaft / Crankshaft synchronization - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Control unit sensor voltage 3 - Voltage intake air pressure sensor - Coolant temp. at engine start - Lambda control loop monitoring - Fresh air blower, maximum speed - Battery charge/discharge current - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 - Var. valve timing press. switch/exh. - Sensor reference voltage 1 - Sensor reference voltage 2 - Part load status • Actuators <ul style="list-style-type: none"> - Disconnection of fuel injector Cylinder 1 - Disconnection of fuel injector Cylinder 2 - Disconnection of fuel injector Cylinder 3 - Disconnection of fuel injector Cylinder 4 - Fuel pump relay - Engine for reg. throttle valve - Main relay - air conditioner compressor relay - Container valve - Engine management system error lights - Inlet camshaft timing control (bank 1) - Exhaust camshaft timing control (bank 1) - Immobilizer control lamp - Speed control light - Ignition coil Cylinder 1 - Ignition coil Cylinder 2 - Ignition coil Cylinder 3 - Ignition coil Cylinder 4 - Radiator fan high speed - Radiator fan: low speed - Oxygen sensor heating, sensor 1 - Oxygen sensor heating, sensor 2 - Variable intake system solenoid valve
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KIA					Spectra - Spectra 2.0i	
Year	Engine	Liters	HP	System	Functions	

2003/09
-
2007/08

2.0

127

Gear box control
4-gears automatic transmission HIVEC 5.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
- **Error memory**
- **Current values**
 - Air compressor request
 - Vehicle driving speed
 - throttle valve position
 - Magnetic valve for reverse gear lock
 - Engine revolution
 - switch, brakes
 - engine torque
 - Solenoid switch valve A
 - gear box oil temperature
 - transmission ratio
 - gears engagement control
 - Solenoid valve: direct gear direct gear
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Tiptronic switch: identification
 - Overdrive solenoid valve
 - Gear lever position
 - Gearbox input speed
 - Transmission output speed
 - Convertor slip rotating speed
 - Magnetic valve for crawling speed
 - solenoid brake band
 - AT-air control magnetic valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
- **Actuators**
 - Magnetic valve for reverse gear lock
 - Solenoid switch valve A
 - Solenoid valve: direct gear direct gear
 - Magnetic valve for crawling speed
 - solenoid brake band
 - Magnetic valve for cruising gear
 - Pressure-regulation magnetic valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3

Gear box control
HIVEC 2.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
- **Error memory**
- **Current values**
 - Air compressor request
 - Vehicle driving speed
 - throttle valve position
 - Switch idle mode
 - Magnetic valve for reverse gear lock
 - Engine revolution
 - switch, brakes
 - engine torque
 - cruise control switch
 - gear box oil temperature
 - gears engagement control
 - Solenoid valve: direct gear direct gear
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Tiptronic switch: identification
 - Overdrive solenoid valve
 - Gear lever position
 - Gearbox input speed

					<ul style="list-style-type: none"> - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
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KIA Spectra Hatchback - Spectra 2.0i Hatchback					
Year	Engine	Liters	HP	System	Functions
2003/09 - 2004/08		2.0	127	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve

KIA Spectra5 Hatchback - Spectra5 2.0i 16V Hatchback					
Year	Engine	Liters	HP	System	Functions

2004/09 -		2.0	140	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
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KIA Sportage - Sportage 2.0					
Year	Engine	Liters	HP	System	Functions
1995/08 -	HW	2.0	87	Gear box control	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve

2002/05				4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
2009/09 - 2010/08		2.0	142	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
					<ul style="list-style-type: none"> • Identification • Clear errors

2008/09 - 2010/08	2.0	142	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Sportage - Sportage 2.0 TCI					
Year	Engine	Liters	HP	System	Functions
1995/08					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification

- 2002/05	RF	2.0	87	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA					Sportage - Sportage 2.0i 4x4	
Year	Engine	Liters	HP	System	Functions	
				Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve 	

2004/09 - 2008/07	Beta II DOHC	2.0	142		<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
				Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
2009/09 - 2010/08		2.0	142	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position

					<ul style="list-style-type: none"> - Gearbox input speed - Transmission output speed - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Sportage - Sportage 2.0 4x4					
Year	Engine	Liters	HP	System	Functions
2008/09 - 2010/08		2.0	142	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset • Error memory • Current values - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2

KIA Sportage - Sportage 2.0i					
Year	Engine	Liters	HP	System	Functions
2004/09 - 2008/08	Beta II DOHC	2.0	142	Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve

KIA Sportage New - Sportage New 2.0i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature

2004/08
-

2.0

142

Gear box control
4-gears automatic transmission HIVEC 5.1

- transmission ratio
- gears engagement control
- Solenoid valve: direct gear direct gear
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Tiptronic switch: identification
- Overdrive solenoid valve
- Gear lever position
- Gearbox input speed
- Transmission output speed
- Convertor slip rotating speed
- Magnetic valve for crawling speed
- solenoid brake band
- AT-air control magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- **Actuators**
 - Magnetic valve for reverse gear lock
 - Solenoid switch valve A
 - Solenoid valve: direct gear direct gear
 - Magnetic valve for crawling speed
 - solenoid brake band
 - Magnetic valve for cruising gear
 - Pressure-regulation magnetic valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3

Gear box control
HIVEC 2.1

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
- **Error memory**
- **Current values**
 - Air compressor request
 - Vehicle driving speed
 - throttle valve position
 - Switch idle mode
 - Magnetic valve for reverse gear lock
 - Engine revolution
 - switch, brakes
 - engine torque
 - cruise control switch
 - gear box oil temperature
 - gears engagement control
 - Solenoid valve: direct gear direct gear
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Tiptronic switch: identification
 - Overdrive solenoid valve
 - Gear lever position
 - Gearbox input speed
 - Transmission output speed
 - Automatic transmission power supply
 - Convertor slip rotating speed
 - Magnetic valve for crawling speed
 - solenoid brake band
 - Mode switch Hold
 - AT-air control magnetic valve
 - Brake tape reduction magnetic valve
- **Actuators**
 - Magnetic valve for reverse gear lock
 - Solenoid valve: direct gear direct gear
 - Magnetic valve for crawling speed
 - solenoid brake band
 - Magnetic valve for cruising gear
 - Power supply relay

- Brake tape reduction magnetic valve

KIA Sportage New - Sportage New 2.7i					
Year	Engine	Liters	HP	System	Functions
2004/09 - 2008/08		2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control

2008/09 - 2010/08	Delta V6	2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Sportage New - Sportage New 2.7i 4x4					
Year	Engine	Liters	HP	System	Functions
2008/09 - 2010/08	Delta V6	2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear

					<ul style="list-style-type: none"> - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Sportage New - Sportage New 2.0 VGT CRDi

Year	Engine	Liters	HP	System	Functions
				Gear box control 4/5-gears automatic transmission HIVEC 5.2	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - kick-down switch - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - MIL-Status - Transmission output speed - Switch for ovedrive deactivation - Engine torque - Gearshift solenoid 1 - Gearshift solenoid 2 - Shift release - Convertor slip rotating speed - Gearshift solenoid 3 - Magnetic valve for crawling speed - solenoid brake band - Operating mode switch - Driving mode - Target Gear - Gear hold button - Clutch damper solenoid valve - AT-air control magnetic valve - Power supply relay gearbox - Gearshift solenoid 5 - Gearshift solenoid 4 - Pressure control solenoid 1 status - Pressure control solenoid 2 status - Pressure control solenoid 3 status - Pressure control solenoid 4 status - Pressure control solenoid 5 status - Syst. press. solen. valve duty cycle - Torque conv. lock-up clutch status • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed

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Gear box control
4-gears automatic transmission GS 12

- Press. build-up/reduc. solenoid valve
- solenoid brake band
- Magnetic valve for cruising gear
- Brake tape reduction magnetic valve
- Power supply relay gearbox
- Pressure-regulation magnetic valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Torque converter clutch solenoid valve
- Gear indicator lamp D1
- Gear indicator lamp D2
- Gear indicator lamp D3
- Gear indicator lamp D4
- Gear indicator lamp D5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
- **Error memory**
- **Current values**
 - Air compressor request
 - Vehicle driving speed
 - throttle valve position
 - Magnetic valve for reverse gear lock
 - Engine revolution
 - cruise control switch
 - Solenoid switch valve A
 - Solenoid switch valve B
 - Solenoid switch valve C
 - Solenoid switch valve D
 - gear box oil temperature
 - transmission ratio
 - gears engagement control
 - Solenoid valve: direct gear direct gear
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Tiptronic switch: identification
 - Overdrive solenoid valve
 - Gear lever position
 - Gearbox input speed
 - Transmission output speed
 - Switch for overdrive deactivation
 - Converter slip rotating speed
 - Automatic pressure control solenoid A
 - Automatic pressure control solenoid B
 - Magnetic valve for crawling speed
 - solenoid brake band
 - AT-air control magnetic valve
 - Brake tape reduction magnetic valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure-regulation magnetic valve 5
- **Actuators**
 - Magnetic valve for reverse gear lock
 - Solenoid valve: direct gear direct gear
 - Selector lever position indication: 5
 - Selector lever position indication: 4
 - Selector lever position indication: 3
 - Selector lever position indication: 2
 - Selector lever position indication: 1
 - Magnetic valve for crawling speed
 - solenoid brake band
 - Magnetic valve for cruising gear

					<ul style="list-style-type: none"> - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Sportage New - Sportage New 2.0 CRDi

Year	Engine	Liters	HP	System	Functions
2004/08 -		2.0	136	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2

- Pressure-regulation magnetic valve 3

KIA Sportage [JA] - Sportage 2.0i					
Year	Engine	Liters	HP	System	Functions
2000/10 - 2004/08	FE	2.0	118	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3

KIA Sportage [JE] - Sportage 2.0i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes

2004/09 - 2007/04	G4GC	2.0	141	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
				Gear box control HIVEC 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Switch idle mode - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - cruise control switch - gear box oil temperature - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Automatic transmission power supply - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - Mode switch Hold - AT-air control magnetic valve - Brake tape reduction magnetic valve • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed

					<ul style="list-style-type: none"> - solenoid brake band - Magnetic valve for cruising gear - Power supply relay - Brake tape reduction magnetic valve
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KIA Sportage [JE] - Sportage 2.0i 4x4					
Year	Engine	Liters	HP	System	Functions
2004/09 - 2007/04	G4GC	2.0	141	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3

KIA Sportage [JE] - Sportage 2.7i 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position

2004/09 - 2007/04	G6BA	2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 <p>• Actuators</p> <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Sportage [JE] - Sportage 2.0					
Year	Engine	Liters	HP	System	Functions
2007/05 - 2010/05	G4GC	2.0	141	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band

					<ul style="list-style-type: none"> - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Sportage [JE] - Sportage 2.0 4x4

Year	Engine	Liters	HP	System	Functions
2007/05 - 2010/05	G4GC	2.0	141	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Convertor slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3

KIA Sportage [JE] - Sportage 2.7

Year	Engine	Liters	HP	System	Functions
2007/05 - 2010/05	G6BA	2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3

KIA Sportage [JE] - Sportage 2.7 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - switch, brakes - engine torque - Solenoid switch valve A - gear box oil temperature - transmission ratio - gears engagement control

2007/05 - 2010/05	G6BA	2.7	175	Gear box control 4-gears automatic transmission HIVEC 5.1	<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Converter slip rotating speed - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 • Actuators - Magnetic valve for reverse gear lock - Solenoid switch valve A - Solenoid valve: direct gear direct gear - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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KIA Sportage [JE] - Sportage 2.0 CRDi 4x4					
Year	Engine	Liters	HP	System	Functions
2004/09 - 2007/04	D4EA	2.0	113	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
2006/01 - 2007/04	D4EA...	2.0	136 - 140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3

					<ul style="list-style-type: none"> - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
2007/05 - 2010/05	D4EA	2.0	150	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2

- Pressure-regulation magnetic valve 3

KIA Sportage [JE] - Sportage 2.0 CRDi					
Year	Engine	Liters	HP	System	Functions
2006/01 - 2007/04	D4EA-V	2.0	136 - 140	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
					<ul style="list-style-type: none"> • Identification • Clear errors

2007/05 - 2010/05	D4EA	2.0	150	Gear box control 4-gears automatic transmission GS 12	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for ovedrive deactivation - Convertor slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators <ul style="list-style-type: none"> - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Vehicle driving speed - throttle valve position - Magnetic valve for reverse gear lock - Engine revolution - cruise control switch

<p>2005/02 - 2007/04</p>	<p>D4EA</p>	<p>2.0</p>	<p>113</p>	<p>Gear box control 4-gears automatic transmission GS 12</p>	<ul style="list-style-type: none"> - Solenoid switch valve A - Solenoid switch valve B - Solenoid switch valve C - Solenoid switch valve D - gear box oil temperature - transmission ratio - gears engagement control - Solenoid valve: direct gear direct gear - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Tiptronic switch: identification - Overdrive solenoid valve - Gear lever position - Gearbox input speed - Transmission output speed - Switch for overdrive deactivation - Converter slip rotating speed - Automatic pressure control solenoid A - Automatic pressure control solenoid B - Magnetic valve for crawling speed - solenoid brake band - AT-air control magnetic valve - Brake tape reduction magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure-regulation magnetic valve 5 • Actuators - Magnetic valve for reverse gear lock - Solenoid valve: direct gear direct gear - Selector lever position indication: 5 - Selector lever position indication: 4 - Selector lever position indication: 3 - Selector lever position indication: 2 - Selector lever position indication: 1 - Magnetic valve for crawling speed - solenoid brake band - Magnetic valve for cruising gear - Brake tape reduction magnetic valve - Power supply relay gearbox - Pressure-regulation magnetic valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3
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[Delta \[844\] - Delta 1.4i 16V](#)

[Delta \[844\] - Delta 1.6 JTD](#)

[Delta \[844\] - Delta 1.9 JTD](#)

[Delta \[844\] - Delta 2.0 MJTD](#)

[Delta \[844\] - Delta 1.8 TBi](#)

[Delta \[844\] - Delta 1.4i LPG](#)

[Musa - Musa 1.4 16V](#)

[Musa - Musa 1.3 MJTD](#)

[Musa - Musa 1.9 JTD](#)

[Musa - Musa 1.4](#)

[Musa - Musa 1.3 MJTD 16V](#)

[Musa - Musa 1.6 JTD](#)

[Musa - Musa 1.4 LPG](#)

[Phedra - Phedra 2.0 16V](#)

[Phedra - Phedra 2.0 JTD 16V](#)

[Phedra - Phedra 2.2 JTD 16V](#)

[Phedra - Phedra 3.0 24V](#)

[Thesis - Thesis 2.0 Turbo 20V](#)

[Thesis - Thesis 2.4 20V](#)

[Thesis - Thesis 3.0 V6 24V](#)

[Thesis - Thesis 2.4 JTD 10V](#)

[Thesis - Thesis 3.2 V6 24V](#)

[Thesis - Thesis 2.4 JTD 20V](#)

[Ypsilon \[843\] - Ypsilon 1.4 LPG](#)

[Ypsilon \[843\] - Ypsilon 1.3 Multijet](#)

Year	Engine	Liters	HP	System	Functions
2008/07 -	198 A 4.000	1.4	120	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - System test - Check antenna function • Adjustments / settings <ul style="list-style-type: none"> - Tire inflation pressure set value change - Transfer configuration - Pressure sensor adaption check (travelling) - Status change, control unit - Number of registered sensor codes • Read the event memory • Delete the event memory • Error memory • Current values <ul style="list-style-type: none"> - Power supply terminal 15 - Power supply - Vehicle driving speed - Overload protection - Tire pressure monitoring system, status - Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> - Fitted tires type - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Ignition key - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Number of monitored wheels - Position/sensor 1 - Position/sensor 2 - Position/sensor 3 - Position/sensor 4 - Position/sensor 5 - Valve code, sensor 1 - Valve code, sensor 2 - Valve code, sensor 3 - Valve code, sensor 4 - Valve code/sensor 5 - Front axle tire pressure set value - Rear axle tire pressure set value - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - Antenna fault detection - Front axle tire pressure set value/warm - Wheel position 1st alarm triggering

					<ul style="list-style-type: none"> - Interference signal - 2nd alarm source - 3rd alarm source - Rear axle tire pressure set value/warm - 1st alarm source - Tire pressure 1st alarm - Wheel position 2nd alarm triggering - Tire pressure 2nd alarm - Wheel position 3rd alarm triggering - Tire pressure 3rd alarm - Remote control signal upper limit - Lower limit remote control signal • Actuators <ul style="list-style-type: none"> - Warning, tyre pressure monitor
2008/07 - 2010/07	198 A 1.000	1.4	150	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - System test - Check antenna function • Adjustments / settings <ul style="list-style-type: none"> - Tire inflation pressure set value change - Transfer configuration - Pressure sensor adaption check (travelling) - Status change, control unit - Number of registered sensor codes • Read the event memory • Delete the event memory • Error memory • Current values <ul style="list-style-type: none"> - Power supply terminal 15 - Power supply - Vehicle driving speed - Overload protection - Tire pressure monitoring system, status - Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> - Fitted tires type - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Ignition key - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Number of monitored wheels - Position/sensor 1 - Position/sensor 2 - Position/sensor 3 - Position/sensor 4 - Position/sensor 5 - Valve code, sensor 1 - Valve code, sensor 2 - Valve code, sensor 3

					<ul style="list-style-type: none"> - Valve code, sensor 4 - Valve code/sensor 5 - Front axle tire pressure set value - Rear axle tire pressure set value - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - Antenna fault detection - Front axle tire pressure set value/warm - Wheel position 1st alarm triggering - Interference signal - 2nd alarm source - 3rd alarm source - Rear axle tire pressure set value/warm - 1st alarm source - Tire pressure 1st alarm - Wheel position 2nd alarm triggering - Tire pressure 2nd alarm - Wheel position 3rd alarm triggering - Tire pressure 3rd alarm - Remote control signal upper limit - Lower limit remote control signal • Actuators <ul style="list-style-type: none"> - Warning, tyre pressure monitor
2010/08 -		1.4	140	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - System test - Check antenna function • Adjustments / settings <ul style="list-style-type: none"> - Tire inflation pressure set value change - Transfer configuration - Pressure sensor adaption check (travelling) - Status change, control unit - Number of registered sensor codes • Read the event memory • Delete the event memory • Error memory • Current values <ul style="list-style-type: none"> - Power supply terminal 15 - Power supply - Vehicle driving speed - Overload protection - Tire pressure monitoring system, status - Tyre inflation monitoring system, pressure monitoring - Fitted tires type - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Ignition key - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left wheel status - Front right wheel status - Rear left wheel status

					<ul style="list-style-type: none"> - Rear right wheel status - Number of monitored wheels - Position/sensor 1 - Position/sensor 2 - Position/sensor 3 - Position/sensor 4 - Position/sensor 5 - Valve code, sensor 1 - Valve code, sensor 2 - Valve code, sensor 3 - Valve code, sensor 4 - Valve code/sensor 5 - Front axle tire pressure set value - Rear axle tire pressure set value - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - Antenna fault detection - Front axle tire pressure set value/warm - Wheel position 1st alarm triggering - Interference signal - 2nd alarm source - 3rd alarm source - Rear axle tire pressure set value/warm - 1st alarm source - Tire pressure 1st alarm - Wheel position 2nd alarm triggering - Tire pressure 2nd alarm - Wheel position 3rd alarm triggering - Tire pressure 3rd alarm - Remote control signal upper limit - Lower limit remote control signal • Actuators <ul style="list-style-type: none"> - Warning, tyre pressure monitor
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LANCIA					Delta [844] - Delta 1.6 JTD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - System test - Check antenna function • Adjustments / settings <ul style="list-style-type: none"> - Tire inflation pressure set value change - Transfer configuration - Pressure sensor adaption check (travelling) - Status change, control unit - Number of registered sensor codes • Read the event memory • Delete the event memory • Error memory • Current values <ul style="list-style-type: none"> - Power supply terminal 15 - Power supply - Vehicle driving speed - Overload protection - Tire pressure monitoring system, status - Tyre inflation monitoring system, pressure monitoring - Fitted tires type - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right 	

2008/07 -	198 A 2.000	1.6	120	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Ignition key - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Number of monitored wheels - Position/sensor 1 - Position/sensor 2 - Position/sensor 3 - Position/sensor 4 - Position/sensor 5 - Valve code, sensor 1 - Valve code, sensor 2 - Valve code, sensor 3 - Valve code, sensor 4 - Valve code/sensor 5 - Front axle tire pressure set value - Rear axle tire pressure set value - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - Antenna fault detection - Front axle tire pressure set value/warm - Wheel position 1st alarm triggering - Interference signal - 2nd alarm source - 3rd alarm source - Rear axle tire pressure set value/warm - 1st alarm source - Tire pressure 1st alarm - Wheel position 2nd alarm triggering - Tire pressure 2nd alarm - Wheel position 3rd alarm triggering - Tire pressure 3rd alarm - Remote control signal upper limit - Lower limit remote control signal • Actuators - Warning, tyre pressure monitor
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LANCIA					Delta [844] - Delta 1.9 JTD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - System test - Check antenna function • Adjustments / settings <ul style="list-style-type: none"> - Tire inflation pressure set value change - Transfer configuration - Pressure sensor adaption check (travelling) - Status change, control unit - Number of registered sensor codes • Read the event memory 	

2008/08 -	844 A 1.000	1.9	190	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> • Delete the event memory • Error memory • Current values <ul style="list-style-type: none"> - Power supply terminal 15 - Power supply - Vehicle driving speed - Overload protection - Tire pressure monitoring system, status - Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> - Fitted tires type - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Ignition key - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Number of monitored wheels - Position/sensor 1 - Position/sensor 2 - Position/sensor 3 - Position/sensor 4 - Position/sensor 5 - Valve code, sensor 1 - Valve code, sensor 2 - Valve code, sensor 3 - Valve code, sensor 4 - Valve code/sensor 5 - Front axle tire pressure set value - Rear axle tire pressure set value - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - Antenna fault detection - Front axle tire pressure set value/warm - Wheel position 1st alarm triggering - Interference signal - 2nd alarm source - 3rd alarm source - Rear axle tire pressure set value/warm - 1st alarm source - Tire pressure 1st alarm - Wheel position 2nd alarm triggering - Tire pressure 2nd alarm - Wheel position 3rd alarm triggering - Tire pressure 3rd alarm - Remote control signal upper limit - Lower limit remote control signal • Actuators <ul style="list-style-type: none"> - Warning, tyre pressure monitor
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Year	Engine	Liters	HP	System	Functions
2008/08 -	198 A 5.000	2.0	165	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - System test - Check antenna function • Adjustments / settings <ul style="list-style-type: none"> - Tire inflation pressure set value change - Transfer configuration - Pressure sensor adaption check (travelling) - Status change, control unit - Number of registered sensor codes • Read the event memory • Delete the event memory • Error memory • Current values <ul style="list-style-type: none"> - Power supply terminal 15 - Power supply - Vehicle driving speed - Overload protection - Tire pressure monitoring system, status - Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> - Fitted tires type - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Ignition key - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Number of monitored wheels - Position/sensor 1 - Position/sensor 2 - Position/sensor 3 - Position/sensor 4 - Position/sensor 5 - Valve code, sensor 1 - Valve code, sensor 2 - Valve code, sensor 3 - Valve code, sensor 4 - Valve code/sensor 5 - Front axle tire pressure set value - Rear axle tire pressure set value - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - Antenna fault detection - Front axle tire pressure set value/warm - Wheel position 1st alarm triggering - Interference signal

					<ul style="list-style-type: none"> - 2nd alarm source - 3rd alarm source - Rear axle tire pressure set value/warm - 1st alarm source - Tire pressure 1st alarm - Wheel position 2nd alarm triggering - Tire pressure 2nd alarm - Wheel position 3rd alarm triggering - Tire pressure 3rd alarm - Remote control signal upper limit - Lower limit remote control signal • Actuators <ul style="list-style-type: none"> - Warning, tyre pressure monitor
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LANCIA **Delta [844] - Delta 1.8 TBI**

Year	Engine	Liters	HP	System	Functions
2009/05 -	939B1000	1.8	200	Tire control system Tire pressure monitor 1.2	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - System test - Check antenna function • Adjustments / settings <ul style="list-style-type: none"> - Tire inflation pressure set value change - Transfer configuration - Pressure sensor adaption check (travelling) - Status change, control unit - Number of registered sensor codes • Read the event memory • Delete the event memory • Error memory • Current values <ul style="list-style-type: none"> - Power supply terminal 15 - Power supply - Vehicle driving speed - Overload protection - Tire pressure monitoring system, status - Tyre inflation monitoring system, pressure monitoring <ul style="list-style-type: none"> - Fitted tires type - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Ignition key - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Number of monitored wheels - Position/sensor 1 - Position/sensor 2 - Position/sensor 3 - Position/sensor 4

					<ul style="list-style-type: none"> - Position/sensor 5 - Valve code, sensor 1 - Valve code, sensor 2 - Valve code, sensor 3 - Valve code, sensor 4 - Valve code, sensor 5 - Front axle tire pressure set value - Rear axle tire pressure set value - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - Antenna fault detection - Front axle tire pressure set value/warm - Wheel position 1st alarm triggering - Interference signal - 2nd alarm source - 3rd alarm source - Rear axle tire pressure set value/warm - 1st alarm source - Tire pressure 1st alarm - Wheel position 2nd alarm triggering - Tire pressure 2nd alarm - Wheel position 3rd alarm triggering - Tire pressure 3rd alarm - Remote control signal upper limit - Lower limit remote control signal • Actuators - Warning, tyre pressure monitor
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LANCIA					Delta [844] - Delta 1.4i LPG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - System test - Check antenna function • Adjustments / settings <ul style="list-style-type: none"> - Tire inflation pressure set value change - Transfer configuration - Pressure sensor adaption check (travelling) - Status change, control unit - Number of registered sensor codes • Read the event memory • Delete the event memory • Error memory • Current values <ul style="list-style-type: none"> - Power supply terminal 15 - Power supply - Vehicle driving speed - Overload protection - Tire pressure monitoring system, status - Tyre inflation monitoring system, pressure monitoring - Fitted tires type - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code 	

				<p>Tire control system Tire pressure monitor 1.2</p>	<ul style="list-style-type: none"> - Front right sensor code - Ignition key - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Number of monitored wheels - Position/sensor 1 - Position/sensor 2 - Position/sensor 3 - Position/sensor 4 - Position/sensor 5 - Valve code, sensor 1 - Valve code, sensor 2 - Valve code, sensor 3 - Valve code, sensor 4 - Valve code/sensor 5 - Front axle tire pressure set value - Rear axle tire pressure set value - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - Antenna fault detection - Front axle tire pressure set value/warm - Wheel position 1st alarm triggering - Interference signal - 2nd alarm source - 3rd alarm source - Rear axle tire pressure set value/warm - 1st alarm source - Tire pressure 1st alarm - Wheel position 2nd alarm triggering - Tire pressure 2nd alarm - Wheel position 3rd alarm triggering - Tire pressure 3rd alarm - Remote control signal upper limit - Lower limit remote control signal • Actuators <ul style="list-style-type: none"> - Warning, tyre pressure monitor
<p>2009/12 -</p>	<p>198A4.000</p>	<p>1.4</p>	<p>120</p>	<p>Engine control</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Coolant temperature - Engine revolution - emergency switch off - electric fuel pump - Engine status - Control unit, internal relay - Injection time, cylinder 1 - Injection time, cylinder 2 - Injection time, cylinder 3 - Injection time, cylinder 4 - Fuel feeding stop - LPG operation - Petrol operation - Liquefied petroleum gas level warning lamp - Liquefied petroleum gas switch - Gas tank level - Operating time

				Landi Renzo LC02	<ul style="list-style-type: none"> - Gas switching waiting time - Gas shut-off valve current input - Control unit temperature - Dry-running operation function - Fuel mode requested - Fuel mode - Current at the fuel pump - Gas rail temperature - Gas rail pressure - Gas shut-off valve - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 • Actuators <ul style="list-style-type: none"> - emergency switch off - electrical fuel pump relay - Liquefied petroleum gas indicator lamp - Injection valve Cylinder 1 - Injection valve Cylinder 2 - Injection valve Cylinder 3 - Injection valve Cylinder 4 - Gas shut-off valve - Operating mode indicator lamp
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LANCIA				Musa - Musa 1.4 16V	
Year	Engine	Liters	HP	System	Functions
2004/10 -	843A1000	1.4	95	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4

					<ul style="list-style-type: none"> - Front axle tire pressure set value - Rear axle tire pressure set value
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
2005/03 -	192B2000	1.4	90	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value

LANCIA					Musa - Musa 1.3 MJTD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left 	

2004/10 -	188A9000	1.3	70	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

LANCIA				Musa - Musa 1.9 JTD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code

				<p>Tire control system Tire pressure monitor 1.1</p>	<ul style="list-style-type: none"> - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
				<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
<p>2004/10 -</p>	<p>188B2000</p>	<p>1.9</p>	<p>100</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset Lambda sensor adaptation values - HFM adaption reset - Rail pressure sensor adjustment • Error memory • Current values <ul style="list-style-type: none"> - Fuel filter warming - Vehicle driving speed - Engine oil pressure - Coolant temperature sensor voltage - throttle valve position - Fuel pump relay - Engine control unit - fuel temperature sensor - Engine revolution - cruise control switch - Lights switch 2 - valve, exhausted gases recirculation - Immobilizer - system power supply - Exceeding the max revolution - turbo charger regulating valve - air conditioner compressor relay - Coolant temperature sensor - Rail pressure, nominal - Rail pressure, actual - Air mass, nominal value - Air mass, actual value - Turbo pressure, nominal value - Turbo pressure, actual value - Acceleration pedal position sensor - Brake pedal switch

				<p>Engine control Diesel CR/EDC 16C9</p>	<ul style="list-style-type: none"> - Clutch pedal switch - Start permission - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Odometer - Air conditioner status - Tempomat speed (required value) - Cooling agent pressure - Glow plugs control - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Atmospheric pressure voltage sensor - Charging-air pressure sensor voltage - Number of electronic control unit programming - Atmospheric pressure sensor - Cruise control button "Resume" - Cruise control system - Overspeed frequency - Overspeed duration - Injected quantity (total) - Ingested air temperature sensor 1 - Intake-air temperature sensor 2 - Fuel quantity control valve - Water in fuel - Km reading at the last programming • Actuators <ul style="list-style-type: none"> - Fuel filter warming - Fuel pump relay - valve, exhausted gases recirculation - Warming up control lamp - Air conditioner relay - Radiator fan stage 1 - Radiator fan stage 2 - Glow relay 1 - Engine management system error lights - Oil pressure control light - Cooling agent temperature warning light - Speed control light - Throttle valves magnetic valve - Fuel water content light - Turbocharger control motor - Fuel metering block
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LANCIA					Musa - Musa 1.4	
Year	Engine	Liters	HP	System	Functions	
2005/03				Tire control system	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right 	

-	350A1000	1.4	75	Tire pressure monitor 1.1	<ul style="list-style-type: none"> - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
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LANCIA				Musa - Musa 1.3 MJTD 16V	
Year	Engine	Liters	HP	System	Functions
				Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
					<ul style="list-style-type: none"> • Identification

				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
2006/01	199A3000	1.3	90		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Throttle valve test - Quantities comparison - Glow plug test - Exhaust gas recirculation system test • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset Lambda sensor adaptation values - HFM adaption reset - Rail pressure sensor adjustment - Differential pressure sensor adjustment - Neutral position initialization - Reset after replacement of additive filter - Turbocharger basic setting - Reset mileage with coolant temp. warnng light ON - Reset mileage with fuel water cont. lamp ON - Reset A/C /cruise control parameters - Reset after speed trigger wheel replacement - Reset after wastegate valve replacement • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Diesel particulate filter regeneration run • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Oil quality - Vehicle driving speed - Accelerator pedal position - Mileage - throttle valve position - Fuel temperature - Coolant temperature - Engine control unit - Engine revolution - atmospheric pressure - Exhausted gases recirculation - Lights switch 2 - Exceeding the max revolution - Rail pressure, nominal - Rail pressure, actual - Air mass, nominal value - Air mass, actual value - Turbo pressure, nominal value - Turbo pressure, actual value - Starter activation - Acceleration pedal position sensor 1 - Acceleration pedal position sensor 2 - Fuel quantity metering device pulse-duty factor - Start permission - Throttle valve required position - Air conditioner status - Gear box transmission identification - Last oil change - Cooling agent pressure - Cooling agent compressor - Brake pedal

Engine control
Diesel EDC 8DF CF5

- Throttle actuator
- Final intake temperature
- EGR cooling bypass solenoid valve
- Mileage since temperature indicator lamp on
- Mileage since fuel water content lamp on
- Mileage with DPF indicator lamp ON
- Clutch pedal stop
- Start/stop release by Central electronics
- Start/stop function
- Start/stop function status
- Start/stop activation prohibition
- Brake booster switch
- Duty cycle load pressure control
- Number of electronic control unit programming
- Fuel pump relay
- Clutch pedal
- Electronic control unit replacement required
- Wastegate valve opening counter
- Wastegate valve opening time
- Speed control signal
- Neutral position
- Overspeed frequency
- Overspeed duration
- Injected quantity (total)
- Status particle filter
- Glow plug actuation
- Operating switch speed
- Particle filter differential pressure
- Oxygen concentration
- Average time last 5 regenerations
- Average range of the last 5 regenerations
- Average range of the last 5 regenerations
- Particle filter temperature
- Km reading at the last programming
- km from the last DPF regeneration
- Particle filter, saturation
- Intake air initial temperature
- Kilometer reading from the last DPF replacement
- Var.turb.geom. turbocharger, specified position
- Partial regeneration operations count
- Mileage on lubrication service warning
- Mileage on last overspeed
- Number of regeneration requests
- VTG turbocharger actual position
- **Actuators**
 - Fuel pump relay
 - valve, exhausted gases recirculation
 - Radiator fan. stage 1
 - Radiator fan. stage 2
 - Suction control valve
 - Engine management system error lights
 - Oil pressure control light
 - Charging-air pressure magnetic valve
 - Cooling agent temperature warning light
 - Speed control light
 - Fuel water content light
 - Glow control light
 - Cooling agent compressor
 - Particle filter control light

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Program sensor code (activator)
- **Error memory**
- **Current values**
 - Tire pressure monitoring system, status
 - Pressure sensor status, front left

	<p>Tire control system Tire pressure monitor 1.1</p>	<ul style="list-style-type: none"> - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
	<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Throttle valve test - Quantities comparison - Glow plug test - Exhaust gas recirculation system test • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset Lambda sensor adaptation values - HFM adaption reset - Rail pressure sensor adjustment - Differential pressure sensor adjustment - Neutral position initialization - Reset after replacement of additive filter - Turbocharger basic setting - Reset mileage with coolant temp. warnng light ON - Reset mileage with fuel water cont. lamp ON - Reset A/C /cruise control parameters - Reset after speed trigger wheel replacement - Reset after wastegate valve replacement • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Diesel particulate filter regeneration run

2010/02

199B1000

1.3

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Engine control
Diesel EDC 8DF CF5

• **Error memory**

• **Current values**

- Power supply
- Oil quality
- Vehicle driving speed
- Accelerator pedal position
- Mileage
- throttle valve position
- Fuel temperature
- Coolant temperature
- Engine control unit
- Engine revolution
- atmospheric pressure
- Exhausted gases recirculation
- Lights switch 2
- Exceeding the max revolution
- Rail pressure, nominal
- Rail pressure, actual
- Air mass, nominal value
- Air mass, actual value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Starter activation
- Acceleration pedal position sensor 1
- Acceleration pedal position sensor 2
- Fuel quantity metering device pulse-duty factor
- Start permission
- Throttle valve required position
- Air conditioner status
- Gear box transmission identification
- Last oil change
- Cooling agent pressure
- Cooling agent compressor
- Brake pedal
- Throttle actuator
- Final intake temperature
- EGR cooling bypass solenoid valve
- Mileage since temperature indicator lamp on
- Mileage since fuel water content lamp on
- Mileage with DPF indicator lamp ON
- Clutch pedal stop
- Start/stop release by Central electronics
- Start/stop function
- Start/stop function status
- Start/stop activation prohibition
- Brake booster switch
- Duty cycle load pressure control
- Number of electronic control unit programming
- Fuel pump relay
- Clutch pedal
- Electronic control unit replacement required
- Wastegate valve opening counter
- Wastegate valve opening time
- Speed control signal
- Neutral position
- Overspeed frequency
- Overspeed duration
- Injected quantity (total)
- Status particle filter
- Glow plug actuation
- Operating switch speed
- Particle filter differential pressure
- Oxygen concentration
- Average time last 5 regenerations
- Average range of the last 5 regenerations
- Average range of the last 5 regenerations
- Particle filter temperature
- Km reading at the last programming

					<ul style="list-style-type: none"> - km from the last DPF regeneration - Particle filter, saturation - Intake air initial temperature - Kilometer reading from the last DPF replacement - Var.turb.geom. turbocharger, specified position - Partial regeneration operations count - Mileage on lubrication service warning - Mileage on last overspeed - Number of regeneration requests - VTG turbocharger actual position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - valve, exhausted gases recirculation - Radiator fan. stage 1 - Radiator fan. stage 2 - Suction control valve - Engine management system error lights - Oil pressure control light - Charging-air pressure magnetic valve - Cooling agent temperature warning light - Speed control light - Fuel water content light - Glow control light - Cooling agent compressor - Particle filter control light
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LANCIA					Musa - Musa 1.6 JTD	
Year	Engine	Liters	HP	System	Functions	
2007/10 -	350A2000	1.6	120	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 	

					<ul style="list-style-type: none"> - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
2008/09	350 A3.000	1.6	115	Tire control system Tire pressure monitor 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values <ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
				Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

LANCIA				Musa - Musa 1.4 LPG	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Program sensor code (activator) • Error memory • Current values

2009/03 -	350A1000	1.4	78	<p>Tire control system Tire pressure monitor 1.1</p>	<ul style="list-style-type: none"> - Tire pressure monitoring system, status - Pressure sensor status, front left - Pressure sensor status, front right - Pressure sensor status, rear left - Pressure sensor status, rear right - Rear left tire temperature - Rear right tire temperature - Front left tire temperature - Front right tire temperature - Rear left sensor code - Rear right sensor code - Front left sensor code - Front right sensor code - Tire pressure, rear right - Tire pressure, rear left - Tire pressure, front left - Tire pressure, front right - Front left tire pressure sensor code - Front right tire pressure sensor code - Rear left tire pressure sensor code - Rear right tire pressure sensor code - Remote control signal - Front left wheel status - Front right wheel status - Rear left wheel status - Rear right wheel status - Warn. thresh.: Infl. press. too low - Maximum temperature - Tire temperature sensor 1 - Tire temperature sensor 2 - Tire temperature sensor 3 - Tire temperature sensor 4 - Front axle tire pressure set value - Rear axle tire pressure set value
				<p>Parking assisting system Park Distance Control 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Coolant temperature - Engine revolution - emergency switch off - electric fuel pump - Engine status - Control unit, internal relay - Injection time, cylinder 1 - Injection time, cylinder 2 - Injection time, cylinder 3 - Injection time, cylinder 4 - Fuel feeding stop - LPG operation - Petrol operation - Liquefied petroleum gas level warning lamp - Liquefied petroleum gas switch

				Engine control Landi Renzo LC02	<ul style="list-style-type: none"> - Gas tank level - Operating time - Gas switching waiting time - Gas shut-off valve current input - Control unit temperature - Dry-running operation function - Fuel mode requested - Fuel mode - Current at the fuel pump - Gas rail temperature - Gas rail pressure - Gas shut-off valve - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 • Actuators <ul style="list-style-type: none"> - emergency switch off - electrical fuel pump relay - Liquefied petroleum gas indicator lamp - Injection valve Cylinder 1 - Injection valve Cylinder 2 - Injection valve Cylinder 3 - Injection valve Cylinder 4 - Gas shut-off valve - Operating mode indicator lamp
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LANCIA Phedra - Phedra 2.0 16V					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2005/09	RFN	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

LANCIA Phedra - Phedra 2.0 JTD 16V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply

2002/09 - 2006/03	RHW	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump <p>• Actuators</p> <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2002/09 - 2006/02	RHM	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump <p>• Actuators</p> <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2006/03 - 2010/12	RHK	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump <p>• Actuators</p> <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
					<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p>

2006/10 - 2010/12	RHR	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Current values - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
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LANCIA Phedra - Phedra 2.2 JTD 16V					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2007/09	4HW	2.2	130	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2007/10 - 2010/12	4HT	2.2	170	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators - Detonation unit warming plug

					<ul style="list-style-type: none"> - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2008/03 - 2010/12	4H01	2.2	170	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

LANCIA Phedra - Phedra 3.0 24V					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2005/09	XFW	3.0	204	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

LANCIA Thesis - Thesis 2.0 Turbo 20V					
Year	Engine	Liters	HP	System	Functions
2002/04					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

- 2009/12	841E.000	2.0	185	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
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LANCIA Thesis - Thesis 2.4 20V					
Year	Engine	Liters	HP	System	Functions
2002/04 - 2009/12	841D.000	2.4	170	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

LANCIA Thesis - Thesis 3.0 V6 24V					
Year	Engine	Liters	HP	System	Functions
2002/04 - 2003/07	841A.000	3.0	215	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

LANCIA Thesis - Thesis 2.4 JTD 10V					
Year	Engine	Liters	HP	System	Functions
2002/04 - 2005/02	841C.000	2.4	150	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

LANCIA Thesis - Thesis 3.2 V6 24V					
Year	Engine	Liters	HP	System	Functions
2003/08 - 2009/12	841A.000	3.2	230	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear

					<ul style="list-style-type: none"> - Trailer operation - System
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LANCIA Thesis - Thesis 2.4 JTD 20V					
Year	Engine	Liters	HP	System	Functions
2003/06 - 2006/02	841H.000	2.4	175	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System
2006/03 - 2009/12	841P.000	2.4	185	Parking assisting system Park Distance Control 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - The ambient temperature - Reverse gear - Trailer operation - System

LANCIA Ypsilon [843] - Ypsilon 1.4 LPG					
Year	Engine	Liters	HP	System	Functions
2009/03 - 2011/11	350 A1.000	1.4	75	Engine control Landi Renzo LC02	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Coolant temperature - Engine revolution - emergency switch off - electric fuel pump - Engine status - Control unit, internal relay - Injection time, cylinder 1 - Injection time, cylinder 2 - Injection time, cylinder 3 - Injection time, cylinder 4 - Fuel feeding stop - LPG operation - Petrol operation - Liquefied petroleum gas level warning lamp - Liquefied petroleum gas switch - Gas tank level - Operating time - Gas switching waiting time - Gas shut-off valve current input - Control unit temperature - Dry-running operation function - Fuel mode requested - Fuel mode - Current at the fuel pump - Gas rail temperature - Gas rail pressure

					<ul style="list-style-type: none"> - Gas shut-off valve - Injection time/cylinder 1 - Injection time/cylinder 2 - Injection time/cylinder 3 - Injection time/cylinder 4 • Actuators <ul style="list-style-type: none"> - emergency switch off - electrical fuel pump relay - Liquefied petroleum gas indicator lamp - Injection valve Cylinder 1 - Injection valve Cylinder 2 - Injection valve Cylinder 3 - Injection valve Cylinder 4 - Gas shut-off valve - Operating mode indicator lamp
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LANCIA					
Ypsilon [843] - Ypsilon 1.3 Multijet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Throttle valve test - Quantities comparison - Glow plug test - Exhaust gas recirculation system test • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Reset Lambda sensor adaptation values - HFM adaption reset - Rail pressure sensor adjustment - Differential pressure sensor adjustment - Neutral position initialization - Reset after replacement of additive filter - Turbocharger basic setting - Reset mileage with coolant temp. warnng light ON - Reset mileage with fuel water cont. lamp ON - Reset A/C /cruise control parameters - Reset after speed trigger wheel replacement - Reset after wastegate valve replacement • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Diesel particulate filter regeneration run • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Oil quality - Vehicle driving speed - Accelerator pedal position - Mileage - throttle valve position - Fuel temperature - Coolant temperature - Engine control unit - Engine revolution - atmospheric pressure - Exhausted gases recirculation - Lights switch 2 - Exceeding the max revolution - Rail pressure, nominal - Rail pressure, actual - Air mass, nominal value - Air mass, actual value - Turbo pressure, nominal value - Turbo pressure, actual value - Starter activation

<p>2009/09 - 2010/11</p>	<p>199 A2.000</p>	<p>1.3</p>	<p>75</p>	<p>Engine control Diesel EDC 8DF CF5</p>	<ul style="list-style-type: none"> - Acceleration pedal position sensor 1 - Acceleration pedal position sensor 2 - Fuel quantity metering device pulse-duty factor - Start permission - Throttle valve required position - Air conditioner status - Gear box transmission identification - Last oil change - Cooling agent pressure - Cooling agent compressor - Brake pedal - Throttle actuator - Final intake temperature - EGR cooling bypass solenoid valve - Mileage since temperature indicator lamp on - Mileage since fuel water content lamp on - Mileage with DPF indicator lamp ON - Clutch pedal stop - Start/stop release by Central electronics - Start/stop function - Start/stop function status - Start/stop activation prohibition - Brake booster switch - Duty cycle load pressure control - Number of electronic control unit programming - Fuel pump relay - Clutch pedal - Electronic control unit replacement required - Wastegate valve opening counter - Wastegate valve opening time - Speed control signal - Neutral position - Overspeed frequency - Overspeed duration - Injected quantity (total) - Status particle filter - Glow plug actuation - Operating switch speed - Particle filter differential pressure - Oxygen concentration - Average time last 5 regenerations - Average range of the last 5 regenerations - Average range of the last 5 regenerations - Particle filter temperature - Km reading at the last programming - km from the last DPF regeneration - Particle filter, saturation - Intake air initial temperature - Kilometer reading from the last DPF replacement - Var.turb.geom. turbocharger, specified position - Partial regeneration operations count - Mileage on lubrication service warning - Mileage on last overspeed - Number of regeneration requests - VTG turbocharger actual position • Actuators <ul style="list-style-type: none"> - Fuel pump relay - valve, exhausted gases recirculation - Radiator fan. stage 1 - Radiator fan. stage 2 - Suction control valve - Engine management system error lights - Oil pressure control light - Charging-air pressure magnetic valve - Cooling agent temperature warning light - Speed control light - Fuel water content light - Glow control light
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[ES - ES 300 3.0i](#)

[ES - ES 330 3.3i](#)

[ES - ES330 3.3](#)

[ES - ES 300 3.0](#)

[GS - GS 400 4.0i](#)

[GS - GS 430 4.3](#)

[GS - GS 300 3.0](#)

[GS \[S1\] - GS 300 3.0i](#)

[GS \[S1\] - GS 430 4.3i](#)

[GS \[S1\] - GS 430 4.3](#)

[GS \[S1\] - GS 300 3.0](#)

[GX \[J1\] - GX 470 4.7 4x4](#)

[IS \[E1\] - IS 200 2.0i Wagon](#)

[IS \[E1\] - IS 300 3.0i Wagon](#)

[IS \[E1\] - IS 300 3.0i](#)

[IS \[E1\] - IS 200 2.0i](#)

[IS \[E2\] - IS 220d 2.2](#)

[LFA - LFA 4.8i](#)

[LS \[F1\] - LS 400 4.0i](#)

[LS \[F2\] - LS 400 4.0i](#)

[LS \[F3\] - LS 430 4.3i](#)

[LX - LX 450 4.5 4x4](#)

[LX \[J1\] - LX 470 4.7 4x4](#)

[RX - RX 330 3.3 4x4](#)

[RX \[L1\] - RX 270 2.7i](#)

[RX \[U1\] - RX 300 3.0 4x4](#)

[RX \[U3\] - RX 300 3.0i 4x4](#)

[SC - SC 300 3.0i Coupe](#)

[SC - SC 400 4.0i Coupe](#)

[SC - SC 430 4.3i Coupe](#)

[SC - SC 400 4.0 Coupe](#)

[SC \[Z4\] - SC 430 4.3 Cabrio](#)

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve

Engine control
TCCS II V3

- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring

1996/08 - 2001/07	1MZFE	3.0	203	<ul style="list-style-type: none"> - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda

Gear box control
Transmission control ECT 2.2

factor) 2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)

- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump

				<ul style="list-style-type: none"> - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position

Engine control
TCCS II V3

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

2001/07 - 2003/07	1MZFE	3.0	215	<ul style="list-style-type: none"> - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Gear box control
Transmission control ECT 2.2

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve

				<ul style="list-style-type: none"> - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2)

<p>1992/03 - 1996/08</p>	<p>3VZFE</p>	<p>3.0</p>	<p>188</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU
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- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test

- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay

					<ul style="list-style-type: none"> - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					ES - ES 330 3.3i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve 	

Engine control
TCCS II V3

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

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				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3)

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

					<ul style="list-style-type: none"> - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					ES - ES330 3.3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control 	

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

Engine control
TCCS II V3

system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact

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- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position

Gear box control
Transmission control ECT 2.2

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

Engine control
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

1995/09 - 2003/08	1MZFE	3.0	215	<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2

Gear box control
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

					<ul style="list-style-type: none"> - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS **GS - GS 400 4.0i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode

Engine control
TCCS II V3

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

1997/08 - 2000/07	1UZFE	4.0	284	<ul style="list-style-type: none"> - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values 				

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Gear box control
Transmission control ECT 2.2

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil

					<ul style="list-style-type: none"> - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					GS - GS 430 4.3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup 	

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Engine control
TCCS II V3

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation

					<ul style="list-style-type: none"> - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS	GS - GS 300 3.0
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4)

Engine control
TCCS II V3

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

1992/09 - 1995/08	2JZGE	3.0	220	<ul style="list-style-type: none"> - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Gear box control
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve

				<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve

Engine control
TCCS II V3

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

				<ul style="list-style-type: none"> - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
1995/09 - 1998/08	2JZGE	3.0	0	<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

Gear box control
Transmission control ECT 2.2

- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve

					<ul style="list-style-type: none"> - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					GS [S1] - GS 300 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil 	

Engine control
TCCS II V3

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1

1997/08 - 2005/01	2JZGE	3.0	222 - 228	<ul style="list-style-type: none"> - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2)

Gear box control
Transmission control ECT 2.2

- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1

				<ul style="list-style-type: none"> - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2

1993/03 - 1997/08	2JZGE	3.0	219	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2)
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- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					GS [S1] - GS 430 4.3i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) 	

Engine control
TCCS II V3

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD

					<ul style="list-style-type: none"> - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<p>2000/07 - 2007/01</p>	<p>3UZFE</p>	<p>4.3</p>	<p>283</p>		<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode
 - Oxygen sensor (bank 2, sensor 1) Lambda actual value

Gear box control
Transmission control ECT 2.2

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system

					<ul style="list-style-type: none"> - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					GS [S1] - GS 430 4.3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 	

<p>2005/01 - 2008/09</p>	<p>3UZFE</p>	<p>4.3</p>	<p>283</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

					<ul style="list-style-type: none"> - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					GS [S1] - GS 300 3.0	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position 	

Engine control
TCCS II V3

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

2005/01 - 2011/12	3GRFSE	3.0	249	<ul style="list-style-type: none"> - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle 				

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Gear box control
Transmission control ECT 2.2

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve

					<ul style="list-style-type: none"> - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS				GX [J1] - GX 470 4.7 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control

Engine control
TCCS II V3

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

2002/11 -	2UZFE	4.7	234	<ul style="list-style-type: none"> - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system
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Gear box control
Transmission control ECT 2.2

- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

					<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					IS [E1] - IS 200 2.0i Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda 	

Engine control
TCCS II V3

- factor) 1
 - regulation factor fuel mixture content (lambda
- factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode
 - Oxygen sensor (bank 2, sensor 1) Lambda
- actual value
 - Lambda sensor (B1,S1) Lambda actual value
 - LS (b1, s1) switch time rich to lean
 - LS (b2, s1) switch time rich to lean
 - LS (b1, s1) switch time lean to rich
 - LS (b2, s1) switch time lean to rich
 - Tank ventilation system: vapour pressure in the
- system
 - Throttle valve closing duty cycle
 - LS (b1,s2) switch time rich to lean
 - LS (b2,s2) switch time rich to lean
 - Oxygen sensor monitoring
 - Lean sensor current(bank 1,sensor 1)
 - Lean sensor current(bank 1,sensor 2)
 - Lean sensor mixture correction (B1,S1)
 - Lean sensor mixture correction (B1,S2)
 - Lambda control/Lambda sensor (B1,S2)

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve

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- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation

Gear box control
Transmission control ECT 2.2

- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring

					<ul style="list-style-type: none"> - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					IS [E1] - IS 300 3.0i Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings 	

- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value

Engine control
TCCS II V3

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system

2001/07 - 2005/07	2JZGE	3.0	214	<ul style="list-style-type: none"> - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement

Gear box control
Transmission control ECT 2.2

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

					<ul style="list-style-type: none"> - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS	IS [E1] - IS 300 3.0i
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4)

Engine control
TCCS II V3

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

2001/07 - 2005/07	2JZGE	3.0	214	<ul style="list-style-type: none"> - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1

Gear box control
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					
IS [E1] - IS 200 2.0i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear

<p>1999/01 - 2005/07</p>	<p>1GFE</p>	<p>2.0</p>	<p>155</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC
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					<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					IS [E2] - IS 220d 2.2	
Year	Engine	Liters	HP	System	Functions	

• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

2005/11

2ADFHV

2.2

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Gear box control
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode

			<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
			<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2

2010/08 -	2ADFTV	2.2	150	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

					<ul style="list-style-type: none"> - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS	LFA - LFA 4.8i
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status

2010/12 -	1LRGUE	4.8	560	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring
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					<ul style="list-style-type: none"> - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					LS [F1] - LS 400 4.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) 	

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

1989/12 - 1994/09	1UZFE	4.0	252	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve
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					<ul style="list-style-type: none"> - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					LS [F2] - LS 400 4.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter 	

Engine control
TCCS II V3

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1

1997/09 - 2000/08	1UZFE	4.0	276 - 284	<ul style="list-style-type: none"> - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off

Gear box control
Transmission control ECT 2.2

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

				<ul style="list-style-type: none"> - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda

Engine control
TCCS II V3

- factor) 1
 - regulation factor fuel mixture content (lambda
- factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode
 - Oxygen sensor (bank 2, sensor 1) Lambda
- actual value
 - Lambda sensor (B1,S1) Lambda actual value
 - LS (b1, s1) switch time rich to lean
 - LS (b2, s1) switch time rich to lean
 - LS (b1, s1) switch time lean to rich
 - LS (b2, s1) switch time lean to rich
 - Tank ventilation system: vapour pressure in the
- system
 - Throttle valve closing duty cycle
 - LS (b1,s2) switch time rich to lean
 - LS (b2,s2) switch time rich to lean
 - Oxygen sensor monitoring
 - Lean sensor current(bank 1,sensor 1)
 - Lean sensor current(bank 1,sensor 2)
 - Lean sensor mixture correction (B1,S1)
 - Lean sensor mixture correction (B1,S2)
 - Lambda control/Lambda sensor (B1,S2)

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve

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2000/08

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- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation

Gear box control
Transmission control ECT 2.2

- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring

				<ul style="list-style-type: none"> - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

1994/10 - 1997/09	1UZFE	4.0	252	Gear box control Transmission control ECT 2.2	<p>system</p> <ul style="list-style-type: none"> - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact
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				<ul style="list-style-type: none"> - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position

<p>1994/10 - 1997/07</p>	<p>1UZFE</p>	<p>4.0</p>	<p>264</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count
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- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump

Engine control
TCCS II V3

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply

2000/08 - 2006/08	3UZFE	4.3	283	<ul style="list-style-type: none"> - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump
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Gear box control
Transmission control ECT 2.2

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

					<ul style="list-style-type: none"> - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS	LX - LX 450 4.5 4x4
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve

Engine control
TCCS II V3

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

<p>1995/11 - 1998/01</p>	<p>1FZFE</p>	<p>4.5</p>	<p>215</p>	<ul style="list-style-type: none"> - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2
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- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Gear box control
Transmission control ECT 2.2

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM

					<ul style="list-style-type: none"> - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					LX [J1] - LX 470 4.7 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement 	

Engine control
TCCS II V3

- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve

- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve

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				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve

Gear box control
Transmission control ECT 2.2

- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring

					<ul style="list-style-type: none"> - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					RX - RX 330 3.3 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system 	

Engine control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

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- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve

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- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode

Gear box control
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

			<ul style="list-style-type: none"> - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
			<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Engine control
TCCS II V3

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil

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- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve

Gear box control
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)

- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1

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Gear box control
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Engine control
TCCS II V3

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve

1998/01 - 2003/02	1MZFE	3.0	223	<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve

Gear box control
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

				<ul style="list-style-type: none"> - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

Engine control
TCCS II V3

- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve

2000/07 - 2003/02	1MZFE	3.0	201	<ul style="list-style-type: none"> - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control

Gear box control
Transmission control ECT 2.2

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

- Ingestion control valve

LEXUS

RX [U3] - RX 300 3.0i 4x4

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none">• Functional tests<ul style="list-style-type: none">- Diagnosis/electronics test- Gear selection- Evaporative emission control system leak test- Injected quantity• Adjustments / settings<ul style="list-style-type: none">- Adaptive parameters reset- Write vehicle identification number (VIN)• Current values<ul style="list-style-type: none">- Short-term AFR correction B2- Long-term AFR correction B2- Solenoid valve, swirl control- Sol. valve, variable intake system- Contact idle- Regulator idle mode: pulse-duty factor- kick-down switch- circuit compressor control- Winter switch- EGR valve - system- Oxygen sensor 1- Oxygen sensor 2- regulation factor fuel mixture content (lambda factor) 1- regulation factor fuel mixture content (lambda factor) 2- electric fuel pump- exhausted gases pressure regul. valve- fuel system - bank 1- fuel system - bank 2- Adjust. revolutions idle- Oil- Canister valve active carbon filter- Direct transmission Converter lockup- Tiptronic switch: lower gear engagement- Tiptronic switch: upper gear engagement- Air mass, actual value- exhausted gases recirculation control- secondary air switch. valve- Solenoid valve: switch. intake manifold 1- Solenoid valve: switch. intake manifold 1- EGR-magnetic valve step position- Ventilation solenoid valve- Lambda-control (bank 2, sensor 2)- Current gear- Lambda controller Lambda probe (B1,S1)- Lambda controller Lambda probe (B2,S1)- Charging-air pressure magnetic valve- Secondary system in limp-home mode- Exhaust pipe bypass solenoid valve- Overdrive deactivation solen. valve- Switch for overdrive deactivation- Secondary air system status- Idle actuator, position- Engine stop request- intake manifold pressure- Oxygen sensor value (bank 1, sensor 3)- Oxygen sensor value (bank 1, sensor 4)- Oxygen sensor value (bank 2, sensor 3)- Oxygen sensor value (bank 2, sensor 4)- Lambda regulation (bank 1, sensor 2)- Air compressor switch off

Engine control
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

2003/02 - 2006/01	1MZFE	3.0	204	<ul style="list-style-type: none"> - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda)
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Gear box control
Transmission control ECT 2.2

- factor) 1
 - regulation factor fuel mixture content (lambda
- factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode
 - Oxygen sensor (bank 2, sensor 1) Lambda
- actual value
 - Lambda sensor (B1,S1) Lambda actual value
 - LS (b1, s1) switch time rich to lean
 - LS (b2, s1) switch time rich to lean
 - LS (b1, s1) switch time lean to rich
 - LS (b2, s1) switch time lean to rich
 - Tank ventilation system: vapour pressure in the
- system
 - Throttle valve closing duty cycle
 - LS (b1,s2) switch time rich to lean
 - LS (b2,s2) switch time rich to lean
 - Oxygen sensor monitoring
 - Lean sensor current(bank 1,sensor 1)
 - Lean sensor current(bank 1,sensor 2)
 - Lean sensor mixture correction (B1,S1)
 - Lean sensor mixture correction (B1,S2)
 - Lambda control/Lambda sensor (B1,S2)

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve

					<ul style="list-style-type: none"> - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					SC - SC 300 3.0i Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) 	

Engine control
TCCS II V3

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD

1991/09 - 1995/08	2JZGE	3.0	228	<ul style="list-style-type: none"> - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings 				

- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode
 - Oxygen sensor (bank 2, sensor 1) Lambda actual value

Gear box control
Transmission control ECT 2.2

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system

					<ul style="list-style-type: none"> - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS						SC - SC 400 4.0i Coupe					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle 					

Engine control
TCCS II V3

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation

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				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4)

Gear box control
Transmission control ECT 2.2

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

					<ul style="list-style-type: none"> - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					SC - SC 430 4.3i Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor 	

- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean

Engine control
TCCS II V3

- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve

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- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear

Gear box control
Transmission control ECT 2.2

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

				<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS				SC - SC 400 4.0 Coupe	
Year	Engine	Liters	HP	System	Functions

• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

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Engine control
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- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode

			<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
			<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2

Engine control
TCCS II V3

- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status

- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

1998/09 - 2000/08	1UZFE	4.0	284	<ul style="list-style-type: none"> - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3)

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

					<ul style="list-style-type: none"> - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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LEXUS					SC [Z4] - SC 430 4.3 Cabrio	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle 	

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Engine control
TCCS II V3

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve

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- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)

Gear box control
Transmission control ECT 2.2

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

[2 \[DE\] - 2 1.3](#)

[2 \[DE\] - 2 1.5](#)

[2 \[DE\] - 2 1.4 CD](#)

[2 \[DE\] - 2 1.6 CD](#)

[3 Hatchback - 3 2.3 Hatchback](#)

[3 \[BL\] - 3 2.0 MZR DISI](#)

[3 \[BL\] - 3 1.6 MZR](#)

[3 \[BL\] - 3 1.6 MZR-CD](#)

[3 \[BL\] - 3 2.2 MZR-CD](#)

[3 \[BL\] - 3 2.0 MZR](#)

[3 \[BL\] Hatchback - 3 2.2 MZR-CD Hatchback](#)

[3 \[BL\] Hatchback - 3 1.6 MZR Hatchback](#)

[3 \[BL\] Hatchback - 3 1.6 MZR-CD Hatchback](#)

[3 \[BL\] Hatchback - 3 2.0 MZR DISI Hatchback](#)

[3 \[BL\] Hatchback - 3 2.3 MPS Hatchback](#)

[3 \[BL\] Hatchback - 3 2.0 MZR Hatchback](#)

[3 \[BL\] Hatchback - 3 2.0 Hatchback MZR](#)

[Biante - Biante 2.0i](#)

[Biante - Biante 2.0i 4WD](#)

[Biante - Biante 2.3i](#)

[Demio \[DE\] - Demio 1.3i](#)

[Demio \[DE\] - Demio 1.3i 4WD](#)

[Demio \[DE\] - Demio 1.5i](#)

[2 - 2 1.3i](#)

[2 - 2 1.5i](#)

[2 - 2 1.5 Hatchback](#)

MAZDA						2 [DE] - 2 1.3	
Year	Engine	Liters	HP	System	Functions		
2007/06 -	ZJ	1.3	75	Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor 		

MAZDA						2 [DE] - 2 1.5	
Year	Engine	Liters	HP	System	Functions		
2007/06 -	ZY	1.5	102 - 103	Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor 		

MAZDA						2 [DE] - 2 1.4 CD	
Year	Engine	Liters	HP	System	Functions		
2007/08 - 2010/09	F6JB	1.4	68	Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor 		

MAZDA						2 [DE] - 2 1.6 CD					
Year	Engine	Liters	HP	System		Functions					
2008/11 - 2010/12	Y6	1.6	90	Anti-block system ESP V5.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor 					
2010/08 -	Y6	1.6	95	Anti-block system ESP V5.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor 					

MAZDA						3 Hatchback - 3 2.3 Hatchback					
Year	Engine	Liters	HP	System		Functions					
2008/09 -	MZR	2.3	0	Anti-block system ESP V6.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right 					

					<ul style="list-style-type: none"> - Wheel speed rear left - Wheel speed rear right - Pressure sensor
2009/09 -	MZR	2.3	0	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor

MAZDA					
3 [BL] - 3 2.0 MZR DISI					
Year	Engine	Liters	HP	System	Functions
2008/12 -	LF...	2.0	151	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor

MAZDA					
3 [BL] - 3 1.6 MZR					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration

2008/12 -	Z6	1.6	105	Anti-block system ESP V6.0	<ul style="list-style-type: none"> - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
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MAZDA						3 [BL] - 3 1.6 MZR-CD					
Year	Engine	Liters	HP	System		Functions					
2008/12 - 2011/07	Y6	1.6	109 - 110	Anti-block system ESP V6.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor 					
2010/10 -		1.6	116	Anti-block system ESP V6.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor 					

					<ul style="list-style-type: none"> - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
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MAZDA 3 [BL] - 3 2.2 MZR-CD					
Year	Engine	Liters	HP	System	Functions
2009/01 - 2011/07	R2	2.2	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor

MAZDA 3 [BL] - 3 2.0 MZR					
Year	Engine	Liters	HP	System	Functions
2008/12 -	LF...	2.0	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor

MAZDA 3 [BL] Hatchback - 3 2.2 MZR-CD Hatchback					
Year	Engine	Liters	HP	System	Functions
2009/01 -	R2	2.2	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor

MAZDA 3 [BL] Hatchback - 3 1.6 MZR Hatchback					
Year	Engine	Liters	HP	System	Functions
2008/12 -	Z6	1.6	105	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor

MAZDA 3 [BL] Hatchback - 3 1.6 MZR-CD Hatchback					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors

2008/12 - 2011/07	Y6	1.6	109 - 110	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
2010/10 -	Y6	1.6	116	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor

MAZDA 3 [BL] Hatchback - 3 2.0 MZR DISI Hatchback					
Year	Engine	Liters	HP	System	Functions
2008/12 -	LF...	2.0	151	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed

					<ul style="list-style-type: none"> - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
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MAZDA 3 [BL] Hatchback - 3 2.3 MPS Hatchback					
Year	Engine	Liters	HP	System	Functions
2009/09 -	L3 DISI	2.3	260	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor

MAZDA 3 [BL] Hatchback - 3 2.0 MZR Hatchback					
Year	Engine	Liters	HP	System	Functions
2008/12 -	LF...	2.0	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right

- Pressure sensor

MAZDA 3 [BL] Hatchback - 3 2.0 Hatchback MZR					
Year	Engine	Liters	HP	System	Functions
2010/09 -		2.0	150	Anti-block system ESP V6.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Configuration - Adaptation, steering wheel angle sensor • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Battery voltage - Driving speed - rotation angle sensor - Lateral acceleration sensor - Driving wheels angle - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor

MAZDA Biante - Biante 2.0i					
Year	Engine	Liters	HP	System	Functions
2008/07 -	LFVD	2.0	151	Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch

MAZDA Biante - Biante 2.0i 4WD					
Year	Engine	Liters	HP	System	Functions
2008/07 -	LFVD	2.0	144	Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch

MAZDA		Biante - Biante 2.3i			
Year	Engine	Liters	HP	System	Functions
2008/07 -	L3VE	2.3	165	Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch

MAZDA		Demio [DE] - Demio 1.3i			
Year	Engine	Liters	HP	System	Functions
2007/05 -	ZJVEM	1.3	90	Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch
2011/06 -	P3VPS	1.3	84	Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch

MAZDA		Demio [DE] - Demio 1.3i 4WD			
Year	Engine	Liters	HP	System	Functions
2007/05 -	ZJVE	1.3	91	Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch

MAZDA		Demio [DE] - Demio 1.5i			
Year	Engine	Liters	HP	System	Functions
2007/05 -	ZYVE	1.5	113	Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Pump motor - Brake pedal switch

MAZDA		2 - 2 1.3i			
Year	Engine	Liters	HP	System	Functions
2008/01 -	ZJ	1.3	86	Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Pump motor - Brake pedal switch

MAZDA		2 - 2 1.5i			
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor

2008/04 -	ZY	1.5	103		<ul style="list-style-type: none"> - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch

MAZDA					
2 - 2 1.5 Hatchback					
Year	Engine	Liters	HP	System	Functions
2010/09 -	MZR	1.5	100	Anti-block system ESP V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - rotation angle sensor - Lateral acceleration sensor - Brake pedal switch - Wheel speed front left - Wheel speed front right - Wheel speed rear left - Wheel speed rear right - Pressure sensor
				Anti-block system ABS V5.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Driving speed - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Pump motor - Brake pedal switch

[A-Klasse \[168\] - A 140](#)

[A-Klasse \[168\] - A 160](#)

[A-Klasse \[168\] - A 160 CDI](#)

[A-Klasse \[168\] - A 170 CDI](#)

[A-Klasse \[168\] - A 190](#)

[A-Klasse \[168\] - A 210 Evolution](#)

[Classe A \[168\] - A 160](#)

[Classe A \[168\] - A 190](#)

[Vaneo \[414\] - Vaneo 1.6](#)

[Vaneo \[414\] - Vaneo 1.9](#)

[Vaneo \[414\] - Vaneo CDI 1.7](#)

Year	Engine	Liters	HP	System	Functions
1997/10 - 2004/08	M 166.940	1.4	82	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor
2001/03 - 2004/08	M 166.940	1.4	82	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4

					<ul style="list-style-type: none"> - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor
2000/09 - 2004/08	M 166.960	1.6	82	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor

MERCEDES BENZ					A-Klasse [168] - A 160	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature 	

1997/10 - 2004/08	M 166.960	1.6	102	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor
2001/03 - 2004/08	M 166.960	1.6	102	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor

MERCEDES BENZ					A-Klasse [168] - A 160 CDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation 	

1998/09 - 2001/02	OM 668.941	1.7	60	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor
2001/03 - 2004/08	OM 668.940	1.7	75	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor

Year	Engine	Liters	HP	System	Functions
1998/07 - 2001/02	OM 668.940	1.7	90	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor
2001/03 - 2004/08	OM 668.942	1.7	95	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X

					<ul style="list-style-type: none"> - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor
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MERCEDES BENZ	A-Klasse [168] - A 190
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Year	Engine	Liters	HP	System	Functions
1999/03 - 2004/08	M 166.990	1.9	125	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D

2001/03 - 2004/08	M 166.990	1.9	125	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor
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MERCEDES BENZ		A-Klasse [168] - A 210 Evolution			
Year	Engine	Liters	HP	System	Functions
2002/03 - 2004/08	M 166.995	2.1	140	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor

Year	Engine	Liters	HP	System	Functions
1999/05 - 2005/08	M 166.960	1.6	102	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor

MERCEDES BENZ						Classe A [168] - A 190					
Year	Engine	Liters	HP	System	Functions						
2000/09 - 2005/08	M 166.990	1.9	125	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 						

					<ul style="list-style-type: none"> - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor
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MERCEDES BENZ					Vaneo [414] - Vaneo 1.6	
Year	Engine	Liters	HP	System	Functions	
2002/02 - 2005/08	M 166.961	1.6	82	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor 	

MERCEDES BENZ					Vaneo [414] - Vaneo 1.9	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing 	

2002/02 - 2005/08	M 166.991	1.9	125	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights - Air-mix flaps - Cooling agent compressor
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MERCEDES BENZ					
Vaneo [414] - Vaneo CDI 1.7					
Year	Engine	Liters	HP	System	Functions
2002/02 - 2005/08	OM 668.914	1.7	75	Heating / Air conditioner Automatic A/C 1.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fresh air valve/air circulation - Engine revolution - Air conditioner compressor - fan for radiator blowing - Coolant temperature sensor - Vaporization temperature sensor - Ambient temperature sensor - Terminal 15 - Cooling agent pressure sensor - Clump 58D - Salon temperature sensor - Humidity sensor: dew point temperature - Air mix flap - Refr. compr. contr. valve actuation - Electric auxiliary heater - Switching off at kick-down - Security shutdown - MAX button - Auxiliary heater heating element 1 - Auxiliary heater – Heating component 2 - Terminal 15X - Auxiliary heater heating element 3 - Supplementary heater, heating element 4 - Supplementary heater, heating element 5 • Actuators <ul style="list-style-type: none"> - Fresh air valve/air circulation - Pump, hot water - Fresh air fan - El. intake fan engine/air conditioner - Button lights

						<ul style="list-style-type: none">- Air-mix flaps- Cooling agent compressor
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[Outlander \[CW\] - Outlander 2.2 DI-D 4x4](#)

Year	Engine	Liters	HP	System	Functions
2007/09 - 2012/12	4H...	2.2	156	Engine control Diesel EDC 16CP39 MIT	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Quantities comparison • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Exhaust gas recirculation control unit - Reset Lambda sensor adaptation values - Rest of particle filter adaption values - HFM adaption reset - Reset DPF adaptation parameters - Reset additive level - Filling of additive tank - Adapt air mass meter - Reset turbocharger adaption values - Exhaust gas recirculation valve basic setting • Special functions <ul style="list-style-type: none"> - Actual value particle filter • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Quantity correction for cylinder 1 - Quantity correction for cylinder 2 - Quantity correction for cylinder 3 - Quantity correction for cylinder 4 - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Coolant temperature - Exhausted gases recirculation system - Battery voltage - Engine revolution - atmospheric pressure - Exhaust gas recirculation control - cruise control switch - valve, exhausted gases recirculation - Pressure control turbo charger - Immobilizer - Regulator, exhausted gases recirculation (ARF) - fan relay - Rail pressure, nominal - Rail pressure, actual - Air mass, nominal value - Air mass, actual value - Turbo pressure, nominal value - Turbo pressure, actual value - Intake air temperature - Brake pedal switch - Acceleration pedal position sensor 1 - Acceleration pedal position sensor 2 - Brake pedal switch (redundancy) - Engine oil pressure signal - Tempomat speed (required value) - Radiator fan control - Cooling agent pressure - Exhausted gases recirculation valve position (EGR) - Additive minimum level - Injected amount of additive - Correction, Injection time - DPF temperature - VGT (variable turbine geometry) Control Status - Time with critical exhaust temperature

					<ul style="list-style-type: none"> - Time with critical piston temperature - Particulate filter contamination level - Estimated remaining HDP operating time - High-pressure pump running time with excessive pressure - Number of electronic control unit programming - Clutch pedal - Exhaust gas recirculation Position Actual Value - Exhaust gas recirculation Position Target Value - Ash content particle filter - Injected quantity (total) - Cooling agent compressor request - Radiator fan controller target value - Particle filter differential pressure - Intake air temperature 2 - Cylinder 1 injector voltage - Cylinder 2 injector voltage - Cylinder 3 injector voltage - Cylinder 4 injector voltage - Mileage (km) since regeneration - Calculated remaining mileage in km - Status speed control - Average time last 5 regenerations - Fuel high pressure control/quantity control - Idle speed control long term adjustment - Additive reservoir - Suction control valve control current nominal value - Suction control valve control current actual value - Distance from the last DPF change - Particle filter quality - Additive system status - Residual additive quantity • Actuators <ul style="list-style-type: none"> - fan for blowing radiator control - turbo charger regulating valve - exhausted gases recirculation solenoid - warming up relay - Engine oil sensor - Suction control valve - Fuel pressure controller - Bypass valve of the exhaust gas recirculation cooler - Additive delivery pump
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[Agila \[A\] - Agila 1.0 Twinport](#)

[Agila \[A\] - Agila 1.2 Twinport](#)

[Astra \[G\] - Astra 1.4 Twinport](#)

[Astra \[G\] Caravan - Astra 1.4 1.4 i Twinport Caravan](#)

[Combo C \[Tour\] - Combo 1.4 i Twinport](#)

[Combo \[D\] - Combo 1.3](#)

[Combo \[D\] - Combo 1.4](#)

[Combo \[D\] - Combo 1.6](#)

[Combo \[D\] - Combo 2.0](#)

[Corsa \[C\] - Corsa 1.0 Twinport](#)

[Corsa \[C\] - Corsa 1.4 Twinport](#)

[Corsa \[C\] - Corsa 1.2i Twinport](#)

[Meriva \[A\] - Meriva 1.4 i Twinport](#)

[Meriva \[A\] - Meriva 1.6 i OPC Turbo](#)

[Tigra \[B\] TwinTop - Tigra 1.4i TwinTop](#)

OPEL				Agila [A] - Agila 1.0 Twinport	
Year	Engine	Liters	HP	System	Functions
2003/08 - 2008/02	Z 10 XEP	1.0	60	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> • Current values - Air consumption meter - Air conditioner switching command - Fuel pump relay - Air mass meter voltage - Air conditioner electromagnetic clutch - compressor - injection duration - Ignition angle - recommended idle revolutions - Immobilizer - Main relay - Car speed sensor - Radiator fan. stage 2 - Service lamp - Ignition - Lambda-control status (bank 1, sensor 1) 1) - Throttle valve memo value - Oil pressure - Fuel fill level signal - Fuel feeding stop - Catalyst protection enrichment (B1) - Full load enrichment - Throttle valve position, Duty cycle - Air conditioner pressure sensor voltage - Throttle valve A, saved idle speed position - Swirl flap position sensor - Oil life - Oil change warning - Air compressor switch off - Radiator fan speed 3: - Vehicle acceleration - Security holding time - Cylinder 1 knock sensor ZW correction - Cylinder 2 knock sensor ZW correction - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - E-Gas fail safe • Adjustment - Throttle valve adaption - Idle running speed programing - Lambda control adaptation

OPEL				Agila [A] - Agila 1.2 Twinport	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Current values - Air consumption meter - Air conditioner switching command - Fuel pump relay - Air mass meter voltage - Air conditioner electromagnetic clutch - compressor - injection duration - Ignition angle - recommended idle revolutions - Immobilizer - Main relay - Car speed sensor - Radiator fan. stage 2 - Service lamp

2004/07 - 2008/02	Z 12 XEP	1.2	80	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> - Ignition - Lambda-control status (bank 1, sensor 1) 1) - Throttle valve memo value - Oil pressure - Fuel fill level signal - Fuel feeding stop - Catalyst protection enrichment (B1) - Full load enrichment - Throttle valve position, Duty cycle - Air conditioner pressure sensor voltage - Throttle valve A, saved idle speed position - Swirl flap position sensor - Oil life - Oil change warning - Air compressor switch off - Radiator fan speed 3: - Vehicle acceleration - Security holding time - Cylinder 1 knock sensor ZW correction - Cylinder 2 knock sensor ZW correction - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - E-Gas fail safe • Adjustment <ul style="list-style-type: none"> - Throttle valve adaption - Idle running speed programing - Lambda control adaptation
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OPEL					
Astra [G] - Astra 1.4 Twinport					
Year	Engine	Liters	HP	System	Functions
2003/09 - 2009/06	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Air consumption meter - Air conditioner switching command - Fuel pump relay - Air mass meter voltage - Air conditioner electromagnetic clutch - compressor - injection duration - Ignition angle - recommended idle revolutions - Immobilizer - Main relay - Car speed sensor - Radiator fan. stage 2 - Service lamp - Ignition - Lambda-control status (bank 1, sensor 1) 1) - Throttle valve memo value - Oil pressure - Fuel fill level signal - Fuel feeding stop - Catalyst protection enrichment (B1) - Full load enrichment - Throttle valve position, Duty cycle - Air conditioner pressure sensor voltage - Throttle valve A, saved idle speed position - Swirl flap position sensor - Oil life - Oil change warning - Air compressor switch off - Radiator fan speed 3: - Vehicle acceleration - Security holding time - Cylinder 1 knock sensor ZW correction - Cylinder 2 knock sensor ZW correction

					<ul style="list-style-type: none"> - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - E-Gas fail safe • Adjustment <ul style="list-style-type: none"> - Throttle valve adaption - Idle running speed programing - Lambda control adaptation
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OPEL Astra [G] Caravan - Astra 1.4 1.4 i Twinport Caravan					
Year	Engine	Liters	HP	System	Functions
2003/09 - 2009/07	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Air consumption meter - Air conditioner switching command - Fuel pump relay - Air mass meter voltage - Air conditioner electromagnetic clutch - compressor - injection duration - Ignition angle - recommended idle revolutions - Immobilizer - Main relay - Car speed sensor - Radiator fan. stage 2 - Service lamp - Ignition - Lambda-control status (bank 1, sensor 1) 1) - Throttle valve memo value - Oil pressure - Fuel fill level signal - Fuel feeding stop - Catalyst protection enrichment (B1) - Full load enrichment - Throttle valve position, Duty cycle - Air conditioner pressure sensor voltage - Throttle valve A, saved idle speed position - Swirl flap position sensor - Oil life - Oil change warning - Air compressor switch off - Radiator fan speed 3: - Vehicle acceleration - Security holding time - Cylinder 1 knock sensor ZW correction - Cylinder 2 knock sensor ZW correction - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - E-Gas fail safe • Adjustment <ul style="list-style-type: none"> - Throttle valve adaption - Idle running speed programing - Lambda control adaptation

OPEL Combo C [Tour] - Combo 1.4 i Twinport					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Air consumption meter - Air conditioner switching command - Fuel pump relay - Air mass meter voltage - Air conditioner electromagnetic clutch - compressor

2004/09 - 2012/01	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> - injection duration - Ignition angle - recommended idle revolutions - Immobilizer - Main relay - Car speed sensor - Radiator fan. stage 2 - Service lamp - Ignition - Lambda-control status (bank 1, sensor 1) 1) - Throttle valve memo value - Oil pressure - Fuel fill level signal - Fuel feeding stop - Catalyst protection enrichment (B1) - Full load enrichment - Throttle valve position, Duty cycle - Air conditioner pressure sensor voltage - Throttle valve A, saved idle speed position - Swirl flap position sensor - Oil life - Oil change warning - Air compressor switch off - Radiator fan speed 3: - Vehicle acceleration - Security holding time - Cylinder 1 knock sensor ZW correction - Cylinder 2 knock sensor ZW correction - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - E-Gas fail safe • Adjustment <ul style="list-style-type: none"> - Throttle valve adaption - Idle running speed programing - Lambda control adaptation
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OPEL Combo [D] - Combo 1.3					
Year	Engine	Liters	HP	System	Functions
2012/02 -	A 13 FD	1.2	90	Parking assisting system Park Distance Control 8.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

OPEL Combo [D] - Combo 1.4					
Year	Engine	Liters	HP	System	Functions
2012/02 -	A 14 FP	1.4	95	Parking assisting system Park Distance Control 8.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed

					<ul style="list-style-type: none"> - Reverse gear - Trailer operation - Number of electronic control unit programming
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OPEL Combo [D] - Combo 1.6					
Year	Engine	Liters	HP	System	Functions
2012/02 -	A 16 FDL	1.6	90	Parking assisting system Park Distance Control 8.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

OPEL Combo [D] - Combo 2.0					
Year	Engine	Liters	HP	System	Functions
2012/02 -	A 20 FD	2.0	135	Parking assisting system Park Distance Control 8.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

OPEL Corsa [C] - Corsa 1.0 Twinport					
Year	Engine	Liters	HP	System	Functions
2003/09 - 2006/09	Z 10 XEP	1.0	60	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Air consumption meter - Air conditioner switching command - Fuel pump relay - Air mass meter voltage - Air conditioner electromagnetic clutch - compressor - injection duration - Ignition angle - recommended idle revolutions - Immobilizer - Main relay - Car speed sensor - Radiator fan. stage 2 - Service lamp - Ignition - Lambda-control status (bank 1, sensor 1) 1) - Throttle valve memo value - Oil pressure - Fuel fill level signal - Fuel feeding stop - Catalyst protection enrichment (B1) - Full load enrichment

					<ul style="list-style-type: none"> - Throttle valve position, Duty cycle - Air conditioner pressure sensor voltage - Throttle valve A, saved idle speed position - Swirl flap position sensor - Oil life - Oil change warning - Air compressor switch off - Radiator fan speed 3: - Vehicle acceleration - Security holding time - Cylinder 1 knock sensor ZW correction - Cylinder 2 knock sensor ZW correction - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - E-Gas fail safe • Adjustment <ul style="list-style-type: none"> - Throttle valve adaption - Idle running speed programing - Lambda control adaptation
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OPEL **Corsa [C] - Corsa 1.4 Twinport**

Year	Engine	Liters	HP	System	Functions
2003/09 - 2006/09	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Air consumption meter - Air conditioner switching command - Fuel pump relay - Air mass meter voltage - Air conditioner electromagnetic clutch - compressor - injection duration - Ignition angle - recommended idle revolutions - Immobilizer - Main relay - Car speed sensor - Radiator fan. stage 2 - Service lamp - Ignition - Lambda-control status (bank 1, sensor 1) 1) - Throttle valve memo value - Oil pressure - Fuel fill level signal - Fuel feeding stop - Catalyst protection enrichment (B1) - Full load enrichment - Throttle valve position, Duty cycle - Air conditioner pressure sensor voltage - Throttle valve A, saved idle speed position - Swirl flap position sensor - Oil life - Oil change warning - Air compressor switch off - Radiator fan speed 3: - Vehicle acceleration - Security holding time - Cylinder 1 knock sensor ZW correction - Cylinder 2 knock sensor ZW correction - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - E-Gas fail safe • Adjustment <ul style="list-style-type: none"> - Throttle valve adaption - Idle running speed programing - Lambda control adaptation

OPEL					Corsa [C] - Corsa 1.2i Twinport	
Year	Engine	Liters	HP	System	Functions	
2004/07 - 2006/09	Z 12 XEP	1.2	80	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Air consumption meter - Air conditioner switching command - Fuel pump relay - Air mass meter voltage - Air conditioner electromagnetic clutch - compressor - injection duration - Ignition angle - recommended idle revolutions - Immobilizer - Main relay - Car speed sensor - Radiator fan. stage 2 - Service lamp - Ignition - Lambda-control status (bank 1, sensor 1) 1) - Throttle valve memo value - Oil pressure - Fuel fill level signal - Fuel feeding stop - Catalyst protection enrichment (B1) - Full load enrichment - Throttle valve position, Duty cycle - Air conditioner pressure sensor voltage - Throttle valve A, saved idle speed position - Swirl flap position sensor - Oil life - Oil change warning - Air compressor switch off - Radiator fan speed 3: - Vehicle acceleration - Security holding time - Cylinder 1 knock sensor ZW correction - Cylinder 2 knock sensor ZW correction - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - E-Gas fail safe • Adjustment <ul style="list-style-type: none"> - Throttle valve adaption - Idle running speed programing - Lambda control adaptation 	

OPEL					Meriva [A] - Meriva 1.4 i Twinport	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Air consumption meter - Air conditioner switching command - Fuel pump relay - Air mass meter voltage - Air conditioner electromagnetic clutch - compressor - injection duration - Ignition angle - recommended idle revolutions - Immobilizer - Main relay - Car speed sensor - Radiator fan. stage 2 	

2004/07 - 2010/03	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> - Service lamp - Ignition - Lambda-control status (bank 1, sensor 1) 1) - Throttle valve memo value - Oil pressure - Fuel fill level signal - Fuel feeding stop - Catalyst protection enrichment (B1) - Full load enrichment - Throttle valve position, Duty cycle - Air conditioner pressure sensor voltage - Throttle valve A, saved idle speed position - Swirl flap position sensor - Oil life - Oil change warning - Air compressor switch off - Radiator fan speed 3: - Vehicle acceleration - Security holding time - Cylinder 1 knock sensor ZW correction - Cylinder 2 knock sensor ZW correction - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - E-Gas fail safe • Adjustment <ul style="list-style-type: none"> - Throttle valve adaption - Idle running speed programing - Lambda control adaptation
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OPEL					
Meriva [A] - Meriva 1.6 i OPC Turbo					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2010/03	Z 16 LET	1.6	180	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Air consumption meter - Air conditioner switching command - Fuel pump relay - Air mass meter voltage - Air conditioner electromagnetic clutch - compressor - injection duration - Ignition angle - recommended idle revolutions - Immobilizer - Main relay - Car speed sensor - Radiator fan. stage 2 - Service lamp - Ignition - Lambda-control status (bank 1, sensor 1) 1) - Throttle valve memo value - Oil pressure - Fuel fill level signal - Fuel feeding stop - Catalyst protection enrichment (B1) - Full load enrichment - Throttle valve position, Duty cycle - Air conditioner pressure sensor voltage - Throttle valve A, saved idle speed position - Swirl flap position sensor - Oil life - Oil change warning - Air compressor switch off - Radiator fan speed 3: - Vehicle acceleration - Security holding time - Cylinder 1 knock sensor ZW correction

					<ul style="list-style-type: none"> - Cylinder 2 knock sensor ZW correction - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - E-Gas fail safe • Adjustment <ul style="list-style-type: none"> - Throttle valve adaption - Idle running speed programing - Lambda control adaptation
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OPEL **Tigra [B] TwinTop - Tigra 1.4i TwinTop**

Year	Engine	Liters	HP	System	Functions
2004/06 - 2009/12	Z 14 XEP	1.4	90	Engine control Motronic ME 7.6.x	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Air consumption meter - Air conditioner switching command - Fuel pump relay - Air mass meter voltage - Air conditioner electromagnetic clutch - compressor - injection duration - Ignition angle - recommended idle revolutions - Immobilizer - Main relay - Car speed sensor - Radiator fan. stage 2 - Service lamp - Ignition - Lambda-control status (bank 1, sensor 1) 1) - Throttle valve memo value - Oil pressure - Fuel fill level signal - Fuel feeding stop - Catalyst protection enrichment (B1) - Full load enrichment - Throttle valve position, Duty cycle - Air conditioner pressure sensor voltage - Throttle valve A, saved idle speed position - Swirl flap position sensor - Oil life - Oil change warning - Air compressor switch off - Radiator fan speed 3: - Vehicle acceleration - Security holding time - Cylinder 1 knock sensor ZW correction - Cylinder 2 knock sensor ZW correction - Cylinder 3 knock sensor ZW correction - Cylinder 4 knock sensor ZW correction - E-Gas fail safe • Adjustment <ul style="list-style-type: none"> - Throttle valve adaption - Idle running speed programing - Lambda control adaptation

[4007 \[I3\] - 4007 2.2 HDi 4x4](#)
[407 \[D2\] Coupe - 407 3.0 HDi 24V Coupe](#)
[806 \[U60\] - 806 1.9 Diesel Turbo](#)
[806 \[U60\] - 806 2.1 Diesel Turbo](#)
[806 \[U60\] - 806 2.0 HDi](#)
[807 \[V2\] - 807 2.0 HDi](#)
[807 \[V2\] - 807 2.2 HDi](#)
[Bipper \[A9\] - Bipper 1.4 HDi](#)
[Bipper \[A9\] - Bipper 1.4](#)
[Bipper \[A9\] - Bipper 1.3 HDi](#)
[Boxer - Boxer 2.8 HDi](#)
[Boxer - Boxer 2.3 D](#)
[Boxer \[U9\] - Boxer 2.2 HDi](#)
[Boxer \[U9\] - Boxer 3.0 HDi](#)
[Expert \[G9\] - Expert 2.0 HDi](#)
[Expert \[G9\] - Expert 1.6 HDi](#)
[Expert \[U64\] - Expert 1.9 Diesel](#)
[Expert \[U64\] - Expert 1.9 Diesel Turbo](#)
[Expert \[U64\] - Expert 1.6i](#)
[Expert \[U64\] - Expert 1.8i](#)
[Expert \[U64\] - Expert 2.0 HDi](#)
[Expert \[U64\] - Expert 2.0i 16V](#)
[Partner \[M5\] - Partner 1.1i](#)
[Partner \[M5\] - Partner 1.4i](#)
[Partner \[M5\] - Partner 1.6i 16V](#)
[Partner \[M5\] - Partner 1.9 Diesel](#)
[Partner \[M5\] - Partner 2.0 HDi](#)
[Partner \[M5\] - Partner 1.6 HDi](#)

Year	Engine	Liters	HP	System	Functions
2007/09 -	4HN	2.2	156	Engine control Diesel EDC 16CP39 MIT	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Quantities comparison • Adjustments / settings <ul style="list-style-type: none"> - Injector quantity adjustment - Exhaust gas recirculation control unit - Reset Lambda sensor adaptation values - Rest of particle filter adaption values - HFM adaption reset - Reset DPF adaptation parameters - Reset additive level - Filling of additive tank - Adapt air mass meter - Reset turbocharger adaption values - Exhaust gas recirculation valve basic setting • Special functions <ul style="list-style-type: none"> - Actual value particle filter • Error memory • Current values <ul style="list-style-type: none"> - Air compressor request - Quantity correction for cylinder 1 - Quantity correction for cylinder 2 - Quantity correction for cylinder 3 - Quantity correction for cylinder 4 - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Coolant temperature - Exhausted gases recirculation system - Battery voltage - Engine revolution - atmospheric pressure - Exhaust gas recirculation control - cruise control switch - valve, exhausted gases recirculation - Pressure control turbo charger - Immobilizer - Regulator, exhausted gases recirculation (ARF) - fan relay - Rail pressure, nominal - Rail pressure, actual - Air mass, nominal value - Air mass, actual value - Turbo pressure, nominal value - Turbo pressure, actual value - Intake air temperature - Brake pedal switch - Acceleration pedal position sensor 1 - Acceleration pedal position sensor 2 - Brake pedal switch (redundancy) - Engine oil pressure signal - Tempomat speed (required value) - Radiator fan control - Cooling agent pressure - Exhausted gases recirculation valve position (EGR) <ul style="list-style-type: none"> - Additive minimum level - Injected amount of additive - Correction, Injection time - DPF temperature - VGT (variable turbine geometry) Control Status - Time with critical exhaust temperature

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

2010/06
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156

Engine control
Diesel EDC 16CP39 MIT

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

					<ul style="list-style-type: none"> value - Suction control valve control current actual value - Distance from the last DPF change - Particle filter quality - Additive system status - Residual additive quantity • Actuators <ul style="list-style-type: none"> - fan for blowing radiator control - turbo charger regulating valve - exhausted gases recirculation solenoid - warming up relay - Engine oil sensor - Suction control valve - Fuel pressure controller - Bypass valve of the exhaust gas recirculation cooler - Additive delivery pump
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PEUGEOT	407 [D2] Coupe - 407 3.0 HDi 24V Coupe
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Quantities comparison - Particulate filter temperature evaluation • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Read configuration - Injector quantity adjustment - Exhaust gas recirculation control unit - Restoration of adaptation values of the exhaust gas recirculation <ul style="list-style-type: none"> - Reset Lambda sensor adaptation values - Reset after replacement of additive filter - Reset, exhaust gas recirculation, solenoid valve, bank 1 - Reset, exhaust gas recirculation, solenoid valve, bank 2 • Special functions <ul style="list-style-type: none"> - Actual value particle filter • Error memory • Current values <ul style="list-style-type: none"> - Transmission type - Quantity correction for cylinder 1 - Quantity correction for cylinder 2 - Quantity correction for cylinder 3 - Quantity correction for cylinder 4 - Quantity correction for cylinder 5 - Quantity correction for cylinder 6 - Vehicle driving speed - Engine oil pressure - Accelerator pedal position - Fuel temperature - Status immobilizer - Coolant temperature - air conditioner/compressor readiness signal - Engine revolution - atmospheric pressure - Gear engaged - oxygen sensor voltage - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed

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Engine control
Diesel EDC 17CP11

- Oxygen sensor warm-up
- Control unit power supply
- signal, brake switch
- recommended idle revolutions
- fuel-air mixture
- Engine status
- ignition blocking signal
- Main relay
- turbo charger regulating valve
- turbo charger regulating valve
- engine oil temperature
- actual value of moment motor
- stop lights switch
- injected fuel quantity
- camshaft with crank shaft engagement
- Additional heating relay
- Rail pressure, nominal
- Rail pressure, actual
- Turbo pressure, nominal value
- Turbo pressure, actual value
- CAN: front axle speed
- Starter activation
- CAN message, engine revolutions signal
- Fan 1 control
- Brake pedal switch
- Acceleration pedal position sensor 1
- Acceleration pedal position sensor 2
- Cruise control: variable speed limiting
- Fuel quantity metering device pulse-duty factor
- Variable speed limit
- Cooling agent pressure sensor
- Full throttle gas pedal position
- Brake pedal switch (redundancy)
- Start permission
- Wheel acceleration
- System in fail safe
- Cooling agent temperature control light
- Tempomat speed (required value)
- Charging-air pressure magnetic valve 2
- Fuel level minimum
- Cooling agent pressure
- Control unit status
- Immobilizer status
- Additive minimum level
- Injected amount of additive
- Particle filter output temperature
- Drive current, high-pressure pump
- Ancillaries status signal
- DPF remaining mileage can be read out
- Particulate filter contamination level
- Alternator regulator
- Number of terminated DPF regenerations
- Tank fill level via CAN
- Radiator fan triggering actual value
- Electr. supplem. heater actuation
- Exhaust gas recirculation Position Actual Value
- Exhaust gas recirculation Position Target Value
- Ash content particle filter
- Distance since last regeneration
- Adaptation for exhaust gas recirculation, bank 1
- Adaptation for exhaust gas recirculation, bank 2
- Calculated fuel quantity in oil
- Exhaust gas recirculation position actual value, bank 2
- Metering unit duty cycle, specified value
- Boost pressure control status bank 1
- Boost pressure control status, bank 2
- Additive tank first filling

					<ul style="list-style-type: none"> - Time until rail pressure attained - Fuel metering unit duty cycle - Final compression - Final compression temperature - Cooling agent compressor request - Exhaust gas temperature before particle filter - Particle filter differential pressure - Initialization - Radiator fan request air-conditioner - CAN message - coolant temperature - Intake air temperature 2 - AGR cooling solenoid valve - Status Particle filter-Regeneration - Particle filter temperature - Status Wake-Up Signal - Driver input torque - Conditions for DPF-Regeneration - Intake air, temperature 1 - Status Tempomat - Carbon black content Particle filter - EGR adaption mode status - Additive reservoir - Average mileage between regenerations - Power loss - Engine oil temperature sensor - Time from last regeneration - Distance from the last DPF change - Particle filter quality - Residual additive quantity - Charge pressure actuator 2 actual position - Charge pressure actuator 2 specified position - Turbocharger boost pressure valve, set value • Actuators <ul style="list-style-type: none"> - Air pressure in intake manifold - Oxygen sensor - circuit compressor control - exhausted gases recirculation control circuit - interference engine - Air mass meter signal - exhausted gases recirculation solenoid 1 - exhausted gases recirculation solenoid 2 - Main relay - warming up relay - Additional heater - Suction control valve - Fuel pressure controller - Charging-air pressure controller 1 - Charging-air pressure controller 2 - Radiator fan high speed - Radiator fan: medium speed - Exhaust gas recirculation control unit - Bypass valve of the exhaust gas recirculation cooler
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PEUGEOT					806 [U60] - 806 1.9 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value 	

1994/12 - 2002/08	DHX	1.9	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
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PEUGEOT				806 [U60] - 806 2.1 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions
1996/04 - 2000/08	P8C	2.1	109 - 110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

PEUGEOT				806 [U60] - 806 2.0 HDi	
Year	Engine	Liters	HP	System	Functions
1999/08 - 2002/08	RHZ	2.0	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water

					<ul style="list-style-type: none"> - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2000/06 - 2002/08	RHW	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

PEUGEOT						807 [V2] - 807 2.0 HDi
Year	Engine	Liters	HP	System	Functions	
2002/06 - 2006/12	RHW	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve 	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status 	

2006/03 - 2010/05	RHK	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2006/06 - 2010/05	RHR	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2010/06 -	RHH	2.0	163	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

PEUGEOT				807 [V2] - 807 2.2 HDi	
Year	Engine	Liters	HP	System	Functions
					• Identification

2002/06 - 2006/07	4HW	2.2	128	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2007/09 - 2010/05	4H...	2.2	163 - 170	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

PEUGEOT Bipper [A9] - Bipper 1.4 HDi					
Year	Engine	Liters	HP	System	Functions
2008/02 -	8HS	1.4	68	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

PEUGEOT Bipper [A9] - Bipper 1.4					
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Year	Engine	Liters	HP	System	Functions
2008/02 -	KFV	1.4	73	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming
2010/04 -	KFT	1.4	73	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

PEUGEOT Bipper [A9] - Bipper 1.3 HDi					
Year	Engine	Liters	HP	System	Functions
2010/08 -	FHZ	1.3	75	Parking assisting system Park Distance Control 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming

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

PEUGEOT Boxer - Boxer 2.3 D					
Year	Engine	Liters	HP	System	Functions

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

PEUGEOT					
Boxer [U9] - Boxer 2.2 HDi					
Year	Engine	Liters	HP	System	Functions
2006/06 -	4HV	2.2	101	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
2010/07 -	4HM	2.2	129	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
2011/06 -	4HG	2.2	110	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

PEUGEOT					
Boxer [U9] - Boxer 3.0 HDi					
Year	Engine	Liters	HP	System	Functions

2006/06 -	F1CE...	3.0	158	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
2010/01 -	F1CE3481N	3.0	146	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
2010/04 -	F1CE3481D	3.0	156	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control
2011/03 -	F1CE3481E	3.0	177	Parking assisting system Park Distance Control 2.3	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Configuration save • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Reverse gear - Trailer operation - Number of electronic control unit programming - Front Park Distance Control

PEUGEOT					Expert [G9] - Expert 2.0 HDi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply 	

2007/02 -	RH...	2.0	120	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2010/04 -	RHH	2.0	163	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

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

- Fuel metering valve

PEUGEOT Expert [U64] - Expert 1.9 Diesel					
Year	Engine	Liters	HP	System	Functions
1995/09 - 2000/05	D9B	1.9	69 - 71	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
1998/06 - 2001/08	WJZ	1.9	69	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
2001/09 - 2007/01	WJY	1.9	71	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection

					<ul style="list-style-type: none"> - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
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PEUGEOT Expert [U64] - Expert 1.9 Diesel Turbo					
Year	Engine	Liters	HP	System	Functions
1995/09 - 2000/05	DHX	1.9	90 - 92	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

PEUGEOT Expert [U64] - Expert 1.6i					
Year	Engine	Liters	HP	System	Functions
1995/09 - 2000/05	220 A2.000	1.6	80	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

PEUGEOT		Expert [U64] - Expert 1.8i			
Year	Engine	Liters	HP	System	Functions
1996/09 - 2007/01	L6B	1.8	95	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

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

2000/06 - 2007/01	RHW	2.0	110	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supple./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
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PEUGEOT					
Expert [U64] - Expert 2.0i 16V					
Year	Engine	Liters	HP	System	Functions
2000/03 - 2007/01	RFN	2.0	136	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supple./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

PEUGEOT					
Partner [M5] - Partner 1.1i					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2005/10	HFX	1.1	60	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supple./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water

					<ul style="list-style-type: none"> - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
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PEUGEOT Partner [M5] - Partner 1.4i					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2008/04	KFW	1.4	75	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

PEUGEOT Partner [M5] - Partner 1.6i 16V					
Year	Engine	Liters	HP	System	Functions
2002/09 - 2008/04	NFU	1.6	109	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve

PEUGEOT Partner [M5] - Partner 1.9 Diesel					
Year	Engine	Liters	HP	System	Functions

2002/09 - 2007/03	WJY	1.9	71	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve
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PEUGEOT					Partner [M5] - Partner 2.0 HDi	
Year	Engine	Liters	HP	System	Functions	
2002/09 - 2006/07	RHY	2.0	90	Heating / Air conditioner Auxiliary/supplementary heater 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status - Combustion air blower actuation - Auxiliary heating request - Flame detection - Fuel dosing pump - Glow element duty cycle - Supplem./auxiliary heater fuel pump • Actuators <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Stationary heating: warming up - Combustion air blower - Fuel dosing pump - Fuel metering valve 	

PEUGEOT					Partner [M5] - Partner 1.6 HDi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Detonation unit warming plug - Pump, hot water - Control unit power supply - Status of park heater - CO-Value - Turbine wheel status 	

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

[Alhambra \[710\] - Alhambra 1.4 TSI](#)
[Alhambra \[710\] - Alhambra 2.0 TDI](#)
[Alhambra \[710\] - Alhambra 2.0 TSI](#)
[Alhambra \[710\] - Alhambra 2.0 TDI 4WD](#)
[Alhambra \[710\] - Alhambra 1.8 TSI](#)
[Altea Freetrack \[5P5, 5P8\] - Altea Freetrack 1.4 TSI](#)
[Altea \[5P1\] - Altea 1.4 TSI](#)
[Ibiza \[6J1\] SC - Ibiza SC 1.4 TSI](#)
[Ibiza \[6J1\] SC - Ibiza SC 1.4 TSI Cupra](#)
[Ibiza \[6J5\] - Ibiza 1.4 TSI](#)
[Ibiza \[6J8\] ST - Ibiza ST 1.4 TSI](#)
[Leon \[1P1\] - Leon 1.8 TSI](#)
[Leon \[1P1\] - Leon 2.0 TDI](#)
[Leon \[1P1\] - Leon 2.0 FSI](#)
[Leon \[1P1\] - Leon 2.0 TFSI](#)
[Leon \[1P1\] - Leon 2.0 TFSI Cupra](#)
[Leon \[1P1\] - Leon 1.6](#)
[Leon \[1P1\] - Leon 1.6 TDI](#)
[Leon \[1P1\] - Leon 1.4](#)
[Leon \[1P1\] - Leon 1.2 TSI](#)
[Leon \[5F1\] - Leon 1.4 TSI](#)
[Leon \[5F1\] - Leon 1.2 TSI](#)
[Leon \[5F1\] - Leon 1.6 TDI](#)
[Leon \[5F1\] - Leon 2.0 TDI](#)
[Leon \[5F5\] - Leon SC 1.2 TSI](#)
[Toledo \[KG3\] - Toledo 1.4 TSI](#)
[Toledo \[KG3\] - Toledo 1.2](#)
[Toledo \[KG3\] - Toledo 1.2 TSI](#)
[Toledo \[KG3\] - Toledo 1.6 TDI](#)
[Toledo \[KG3\] - Toledo 1.6](#)

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear - Engine status - Nominal parameters throttle valve - engine oil temperature - Air mass, nominal value - Turbo pressure, nominal value - Turbo pressure, actual value - Intake air temperature - Engine oil level - Torque limitation - Oxygen sensor voltage (bank 1-sensor 1) - Oxygen sensor voltage (bank 1-sensor 2) - Set value, high fuel pressure - Fuel level (quantity) - Short-term mixture correction, bank 1 - Long-term mixture correction, bank 1 - Cooling agent temperature motor - Idle running speed target value - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Longitudinal acceleration - Rate correction factor - Tempomat speed (required value) - Lambda probe heating resistance (B1, S1) - Lambda probe heating resistance (B1, S2) - Radiator fan 1 control - "Oil minimum" warning - Engine torque

Engine control
Motronic MED 17.5 UDS

- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
 - Oxygen sensor (b1,s2): Ri limit value
 - Oxygen sensor (b1,s1): characteristics offset
 - Oxygen sensor (b1,S1) fast offset adaptation:
counter
 - Oxygen sensor (b1,s1): Ceramics temperature
 - Oxygen sensor ageing check (S2): result
 - Operating instructions
 - Catalytic converter O2 capacity: measured
 - Catalytic converter O2 capacity: ageing corr.
factor
 - Throttle valve position: absolute
 - Throttle valve position: standardised
 - Ambient air pressure
 - Conversion check: Measured value
 - Conversion check: Result
 - Torque loss adaption
 - Throttle valve adaption: Result
 - Short-term throttle valve adaption to air mass
meter
 - Air leakage
 - Long-term throttle valve adaptation to air mass
meter
 - Charge-air pressure control: set value

- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2

2010/05 - 2012/05	CAVA	1.4	150	<ul style="list-style-type: none"> - Knock sensor voltage Cylinder 3 - Knock sensor voltage Cylinder 4 - CAM: Deviation from reference position - Magnetic clutch actuation duty cycle - A/C compressor refrigerant pressure - Compressor control flap: actual/specified angle difference - ESP reduced required torque - ESP increased required torque - Oxygen sensor heating (B1, S1), actuation - Oxygen sensor heating (B1, S2), actuation - Fuel low pressure: Adaptation value - Drive specified torque - Crankshaft specified torque - Lambda control (b1): Part load adaptation value - Brake booster pressure raw value - Temperature sensor 1 compressor 2, raw value - Dew point, heat quantity (b1,s1), model value - Dew point, heat quantity (b1,s2), model value - Dew point end, counter start (b1,s1) - Dew point end, counter start (b1,s2) - Brake booster pressure actual value - Pressure upstream of charging module, raw value - Brake booster pump test: Result - Lateral acceleration raw value - Intake manifold intake air temperature, raw value - Intake air temperature upstream of throttle valve: raw value - Time since terminal 15 off - Combustion chamber air charge: Set value - Brake booster vacuum - Travel time with MIL activated - Brake booster vacuum pump - Lambda control deactivation - Exh. gas temperat. sensor (bank 1, sensor 1) - Camshaft speed - Throttle valve position 2 - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Coolant temp. at engine start - Magnetic clutch monitoring - Temperature sensor downstream of radiator: Raw voltage • Actuators <ul style="list-style-type: none"> - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed 				

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

Tire control system
Tire pressure monitor 4.0

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

				<ul style="list-style-type: none"> - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature

- Battery voltage
- Fuel consumption
- Ignition angle reduction: cyl. 1
- Ignition angle reduction: cyl. 2
- Ignition angle reduction: cyl. 3
- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status

Engine control
Motronic MED 17.5 UDS

- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass
meter
- Air leakage
- Long-term throttle valve adaptation to air mass
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque
power loss
- Ignition angle retard: mean value

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- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum

- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring
- Temperature sensor downstream of radiator:

Raw voltage

• Actuators

- Air conditioner electromagnetic clutch - compressor
- Turbo charger air circulation valve
- Inlet camshaft timing control (bank 1)
- Fuel quantity control valve
- Radiator fan controller 1
- Electric fuel pump control unit
- Compressor control flap
- Aux coolant pump
- Evaporative emission control regeneration valve
- Wastegate solenoid valve
- Actuator structure-borne noise

• Identification

• Clear errors

• Adjustments / settings

- Tire pressure monitor individual specified pressure adjustment

• Error memory

• Current values

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6

Tire control system
Tire pressure monitor 4.0

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

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

					<ul style="list-style-type: none"> - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear - Engine status - Nominal parameters throttle valve - engine oil temperature - Air mass, nominal value - Turbo pressure, nominal value - Turbo pressure, actual value - Intake air temperature - Engine oil level - Torque limitation - Oxygen sensor voltage (bank 1-sensor 1) - Oxygen sensor voltage (bank 1-sensor 2) - Set value, high fuel pressure - Fuel level (quantity) - Short-term mixture correction, bank 1 - Long-term mixture correction, bank 1 - Cooling agent temperature motor - Idle running speed target value - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Longitudinal acceleration - Rate correction factor - Tempomat speed (required value) - Lambda probe heating resistance (B1, S1)

- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass
meter

Engine control
Motronic MED 17.5 UDS

- Air leakage
- Long-term throttle valve adaptation to air mass meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle

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- Accelerator pedal: limitation
 - Throttle valve air mass flow
 - Knock sensor voltage Cylinder 1
 - Knock sensor voltage Cylinder 2
 - Knock sensor voltage Cylinder 3
 - Knock sensor voltage Cylinder 4
 - CAM: Deviation from reference position
 - Magnetic clutch actuation duty cycle
 - A/C compressor refrigerant pressure
 - Compressor control flap: actual/specified angle difference
 - ESP reduced required torque
 - ESP increased required torque
 - Oxygen sensor heating (B1, S1), actuation
 - Oxygen sensor heating (B1, S2), actuation
 - Fuel low pressure: Adaptation value
 - Drive specified torque
 - Crankshaft specified torque
 - Lambda control (b1): Part load adaptation value
 - Brake booster pressure raw value
 - Temperature sensor 1 compressor 2, raw value
 - Dew point, heat quantity (b1,s1), model value
 - Dew point, heat quantity (b1,s2), model value
 - Dew point end, counter start (b1,s1)
 - Dew point end, counter start (b1,s2)
 - Brake booster pressure actual value
 - Pressure upstream of charging module, raw value
 - Brake booster pump test: Result
 - Lateral acceleration raw value
 - Intake manifold intake air temperature, raw value
 - Intake air temperature upstream of throttle valve: raw value
 - Time since terminal 15 off
 - Combustion chamber air charge: Set value
 - Brake booster vacuum
 - Travel time with MIL activated
 - Brake booster vacuum pump
 - Lambda control deactivation
 - Exh. gas temperat. sensor (bank 1, sensor 1)
 - Camshaft speed
 - Throttle valve position 2
 - Missfire detection counter Cylinder 1
 - Missfire detection counter Cylinder 2
 - Missfire detection counter Cylinder 3
 - Missfire detection counter Cylinder 4
 - Coolant temp. at engine start
 - Magnetic clutch monitoring
 - Temperature sensor downstream of radiator:
- Raw voltage
- **Actuators**
 - Air conditioner electromagnetic clutch - compressor
 - Turbo charger air circulation valve
 - Inlet camshaft timing control (bank 1)
 - Fuel quantity control valve
 - Radiator fan controller 1
 - Electric fuel pump control unit
 - Compressor control flap
 - Aux coolant pump
 - Evaporative emission control regeneration valve
 - Wastegate solenoid valve
 - Actuator structure-borne noise

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Tire pressure monitor individual specified

pressure adjustment

• **Error memory**

• **Current values**

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

Tire control system
Tire pressure monitor 4.0

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

					<ul style="list-style-type: none"> - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT					Alhambra [710] - Alhambra 2.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code 	

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

2010/05 -	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure
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				<ul style="list-style-type: none"> - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2

2011/05 -	CFFE	2.0	116	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded
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- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure

				<ul style="list-style-type: none"> - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature

2012/11
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CFGC

2.0

177

Tire control system
Tire pressure monitor 4.0

received

- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded

					<ul style="list-style-type: none"> - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded

2010/12
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2.0

200

Tire control system
Tire pressure monitor 4.0

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

					<ul style="list-style-type: none"> - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT					Alhambra [710] - Alhambra 2.0 TDI 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 	

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

2011/05
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CFFB

2.0

140

Tire control system
Tire pressure monitor 4.0

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

					<ul style="list-style-type: none"> - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT					Alhambra [710] - Alhambra 1.8 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected 	

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

2012/11 -	CDAA	1.8	160	Tire control system Tire pressure monitor 4.0	<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently
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					monitored wheel set - Specified pressure front axle, currently monitored wheel set monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT					Altea Freetrack [5P5, 5P8] - Altea Freetrack 1.4 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear 	

- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda

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Engine control
Motronic MED 17.5 UDS

- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass
meter
- Air leakage
- Long-term throttle valve adaptation to air mass
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque
power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change

- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3

					<ul style="list-style-type: none"> - Missfire detection counter Cylinder 4 - Coolant temp. at engine start - Magnetic clutch monitoring - Temperature sensor downstream of radiator: <p>Raw voltage</p> <ul style="list-style-type: none"> • Actuators - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
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SEAT		Altea [5P1] - Altea 1.4 TSI			
Year	Engine	Liters	HP	System	Functions
2007/11 -	CAXC	1.4	125	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

SEAT

Ibiza [6J1] SC - Ibiza SC 1.4 TSI

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear - Engine status - Nominal parameters throttle valve - engine oil temperature - Air mass, nominal value - Turbo pressure, nominal value - Turbo pressure, actual value - Intake air temperature - Engine oil level - Torque limitation - Oxygen sensor voltage (bank 1-sensor 1) - Oxygen sensor voltage (bank 1-sensor 2) - Set value, high fuel pressure - Fuel level (quantity) - Short-term mixture correction, bank 1 - Long-term mixture correction, bank 1 - Cooling agent temperature motor - Idle running speed target value - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Longitudinal acceleration - Rate correction factor - Tempomat speed (required value) - Lambda probe heating resistance (B1, S1) - Lambda probe heating resistance (B1, S2) - Radiator fan 1 control - "Oil minimum" warning

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Engine control
Motronic MED 17.5 UDS

- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass
meter
- Air leakage
- Long-term throttle valve adaptation to air mass
meter

- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1

					<ul style="list-style-type: none"> - Knock sensor voltage Cylinder 2 - Knock sensor voltage Cylinder 3 - Knock sensor voltage Cylinder 4 - CAM: Deviation from reference position - Magnetic clutch actuation duty cycle - A/C compressor refrigerant pressure - Compressor control flap: actual/specified angle difference - ESP reduced required torque - ESP increased required torque - Oxygen sensor heating (B1, S1), actuation - Oxygen sensor heating (B1, S2), actuation - Fuel low pressure: Adaptation value - Drive specified torque - Crankshaft specified torque - Lambda control (b1): Part load adaptation value - Brake booster pressure raw value - Temperature sensor 1 compressor 2, raw value - Dew point, heat quantity (b1,s1), model value - Dew point, heat quantity (b1,s2), model value - Dew point end, counter start (b1,s1) - Dew point end, counter start (b1,s2) - Brake booster pressure actual value - Pressure upstream of charging module, raw value - Brake booster pump test: Result - Lateral acceleration raw value - Intake manifold intake air temperature, raw value - Intake air temperature upstream of throttle valve: raw value - Time since terminal 15 off - Combustion chamber air charge: Set value - Brake booster vacuum - Travel time with MIL activated - Brake booster vacuum pump - Lambda control deactivation - Exh. gas temperat. sensor (bank 1, sensor 1) - Camshaft speed - Throttle valve position 2 - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Coolant temp. at engine start - Magnetic clutch monitoring - Temperature sensor downstream of radiator: <p>Raw voltage</p> <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2)

- Evaporative emission control regeneration valve
- Camshaft timing control (B1), inlet

- **Adjustments / settings**

- Adaptive parameters reset
- Basic adjustment throttle valve
- Activate/deactivate cruise control
- Compressor magnetic clutch basic setting
- Compressor control flap basic setting
- Activate/deactivate passenger compartment

supplementary heater

- **Special functions**

- Fuel tank emptying
- Bleeding fuel system
- Fuel pressure reduction

- **Error memory**

- **Current values**

- Fuel pressure
- Vehicle driving speed
- Accelerator pedal position
- Fuel temperature
- Battery voltage
- Fuel consumption
- Ignition angle reduction: cyl. 1
- Ignition angle reduction: cyl. 2
- Ignition angle reduction: cyl. 3
- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)

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Engine control
Motronic MED 17.5 UDS

- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass
meter
- Air leakage
- Long-term throttle valve adaptation to air mass
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time

- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value

					<ul style="list-style-type: none"> - Drive specified torque - Crankshaft specified torque - Lambda control (b1): Part load adaptation value - Brake booster pressure raw value - Temperature sensor 1 compressor 2, raw value - Dew point, heat quantity (b1,s1), model value - Dew point, heat quantity (b1,s2), model value - Dew point end, counter start (b1,s1) - Dew point end, counter start (b1,s2) - Brake booster pressure actual value - Pressure upstream of charging module, raw value - Brake booster pump test: Result - Lateral acceleration raw value - Intake manifold intake air temperature, raw value - Intake air temperature upstream of throttle valve: raw value - Time since terminal 15 off - Combustion chamber air charge: Set value - Brake booster vacuum - Travel time with MIL activated - Brake booster vacuum pump - Lambda control deactivation - Exh. gas temperat. sensor (bank 1, sensor 1) - Camshaft speed - Throttle valve position 2 - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Coolant temp. at engine start - Magnetic clutch monitoring - Temperature sensor downstream of radiator: Raw voltage • Actuators <ul style="list-style-type: none"> - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regenerative valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying

- Bleeding fuel system
- Fuel pressure reduction
- **Error memory**
- **Current values**
- Fuel pressure
- Vehicle driving speed
- Accelerator pedal position
- Fuel temperature
- Battery voltage
- Fuel consumption
- Ignition angle reduction: cyl. 1
- Ignition angle reduction: cyl. 2
- Ignition angle reduction: cyl. 3
- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status

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Engine control
Motronic MED 17.5 UDS

- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass
meter
- Air leakage
- Long-term throttle valve adaptation to air mass
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume

- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value

				<ul style="list-style-type: none"> - Brake booster pump test: Result - Lateral acceleration raw value - Intake manifold intake air temperature, raw value - Intake air temperature upstream of throttle valve: raw value - Time since terminal 15 off - Combustion chamber air charge: Set value - Brake booster vacuum - Travel time with MIL activated - Brake booster vacuum pump - Lambda control deactivation - Exh. gas temperat. sensor (bank 1, sensor 1) - Camshaft speed - Throttle valve position 2 - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Coolant temp. at engine start - Magnetic clutch monitoring - Temperature sensor downstream of radiator: <p>Raw voltage</p> <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3

- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request

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Engine control
Motronic MED 17.5 UDS

- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass
meter
- Air leakage
- Long-term throttle valve adaptation to air mass
meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque
power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle

- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed

					<ul style="list-style-type: none"> - Throttle valve position 2 - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Coolant temp. at engine start - Magnetic clutch monitoring - Temperature sensor downstream of radiator: <p>Raw voltage</p> <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
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SEAT					Ibiza [6J1] SC - Ibiza SC 1.4 TSI Cupra	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear - Engine status - Nominal parameters throttle valve - engine oil temperature - Air mass, nominal value 	

- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number

2009/03 - 2012/06	CAVE	1.4	180	Engine control Motronic MED 17.5 UDS	<ul style="list-style-type: none"> - Oxygen sensor (b1,s2): Ri limit value - Oxygen sensor (b1,s1): characteristics offset - Oxygen sensor (b1,S1) fast offset adaptation: counter - Oxygen sensor (b1,s1): Ceramics temperature - Oxygen sensor ageing check (S2): result - Operating instructions - Catalytic converter O2 capacity: measured - Catalytic converter O2 capacity: ageing corr. factor - Throttle valve position: absolute - Throttle valve position: standardised - Ambient air pressure - Conversion check: Measured value - Conversion check: Result - Torque loss adaption - Throttle valve adaption: Result - Short-term throttle valve adaption to air mass meter - Air leakage - Long-term throttle valve adaptation to air mass meter - Charge-air pressure control: set value - Intake manifold pressure, raw value - Ignition timing adjustment, cyl. 1 - Absolute suction pressure - Equivalence ratio: set value - Mileage since fault memory cleared - Distance covered with active MIL - Status, initial filling, fuel tank - Time since engine start - Absolute load value - Standardised load rating - Starter control: Interlock or P/N signal - Average injection time - Engine start: start synchronisation - Camshaft position: Start of phase window - Accelerator switch positions - Auxiliary system torque request - ACC specified acceleration - Evap.emiss.ctrl. control valve: specified position - Test steps still to be implemented - Long-term mixture correction/idle (B1) - Crankshaft angle / quantity control valve closed - Crankshaft angle / quantity control valve opened - Fuel HP regulation: Adaptation value - High pressure fuel pump: delivery volume - Total vehicle mileage - Total control unit mileage - Torque loss adaptation: Idle - Adaptation A/C compressor torque power loss - Adaptation of transmission torque power loss - Adaptation transmission and compressor torque power loss - Ignition angle retard: mean value - Reference moment, misfire detection - EVAP system: adaptation factor - Irregular CU deactivations: counter reading - Compressor control flap actuation - EVAP diagnosis: actuation duty cycle - EVAP diagnosis: differential pressure ratio - EVAP diagnosis: Result correlation factor - Knock sensor test: short trip result - Idle speed control: Requested torque change - Long-term adjustment LR bank 1 - Load value: set value - Fuel pump: set value - Kick-down shift point adaptation
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- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring
- Temperature sensor downstream of radiator:

					<p>Raw voltage</p> <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear - Engine status - Nominal parameters throttle valve - engine oil temperature - Air mass, nominal value - Turbo pressure, nominal value - Turbo pressure, actual value - Intake air temperature - Engine oil level - Torque limitation - Oxygen sensor voltage (bank 1-sensor 1) - Oxygen sensor voltage (bank 1-sensor 2) - Set value, high fuel pressure - Fuel level (quantity) - Short-term mixture correction, bank 1 - Long-term mixture correction, bank 1 - Cooling agent temperature motor - Idle running speed target value

- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure

2012/07 -	CT...	1.4	180	Engine control Motronic MED 17.5 UDS	<ul style="list-style-type: none"> - Conversion check: Measured value - Conversion check: Result - Torque loss adaption - Throttle valve adaption: Result - Short-term throttle valve adaption to air mass meter - Air leakage - Long-term throttle valve adaptation to air mass meter - Charge-air pressure control: set value - Intake manifold pressure, raw value - Ignition timing adjustment, cyl. 1 - Absolute suction pressure - Equivalence ratio: set value - Mileage since fault memory cleared - Distance covered with active MIL - Status, initial filling, fuel tank - Time since engine start - Absolute load value - Standardised load rating - Starter control: Interlock or P/N signal - Average injection time - Engine start: start synchronisation - Camshaft position: Start of phase window - Accelerator switch positions - Auxiliary system torque request - ACC specified acceleration - Evap.emiss.ctrl. control valve: specified position - Test steps still to be implemented - Long-term mixture correction/idle (B1) - Crankshaft angle / quantity control valve closed - Crankshaft angle / quantity control valve opened - Fuel HP regulation: Adaptation value - High pressure fuel pump: delivery volume - Total vehicle mileage - Total control unit mileage - Torque loss adaptation: Idle - Adaptation A/C compressor torque power loss - Adaptation of transmission torque power loss - Adaptation transmission and compressor torque power loss - Ignition angle retard: mean value - Reference moment, misfire detection - EVAP system: adaptation factor - Irregular CU deactivations: counter reading - Compressor control flap actuation - EVAP diagnosis: actuation duty cycle - EVAP diagnosis: differential pressure ratio - EVAP diagnosis: Result correlation factor - Knock sensor test: short trip result - Idle speed control: Requested torque change - Long-term adjustment LR bank 1 - Load value: set value - Fuel pump: set value - Kick-down shift point adaptation - Inlet camshaft timing actuation (b1) - Level detection test result - Camshaft actuator actual/specified angle difference - Calculated torque reduction on transmission intervention - Internal torque set value formation - Compressor test - Accelerator pedal travel - Accelerator pedal position 2 - Test EVAP valve: Result - Inlet camshaft control test (b1): result - Number of invalid keys
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- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring
- Temperature sensor downstream of radiator:
- Raw voltage
- **Actuators**
- Air conditioner electromagnetic clutch - compressor
- Turbo charger air circulation valve
- Inlet camshaft timing control (bank 1)
- Fuel quantity control valve
- Radiator fan controller 1
- Electric fuel pump control unit
- Compressor control flap
- Aux coolant pump
- Evaporative emission control regeneration valve
- Wastegate solenoid valve

- Actuator structure-borne noise

SEAT				Ibiza [6J5] - Ibiza 1.4 TSI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none">• Identification• Clear errors• Functional tests<ul style="list-style-type: none">- Generate readiness code- catalytic system effectiveness, bank 1- Lambda sensor ageing (bank 1, sensor 1)- Lambda probe ageing (B1, S2)- Evaporative emission control regeneration valve- Camshaft timing control (B1), inlet• Adjustments / settings<ul style="list-style-type: none">- Adaptive parameters reset- Basic adjustment throttle valve- Activate/deactivate cruise control- Compressor magnetic clutch basic setting- Compressor control flap basic setting- Activate/deactivate passenger compartment supplementary heater• Special functions<ul style="list-style-type: none">- Fuel tank emptying- Bleeding fuel system- Fuel pressure reduction• Error memory• Current values<ul style="list-style-type: none">- Fuel pressure- Vehicle driving speed- Accelerator pedal position- Fuel temperature- Battery voltage- Fuel consumption- Ignition angle reduction: cyl. 1- Ignition angle reduction: cyl. 2- Ignition angle reduction: cyl. 3- Ignition angle reduction: cyl. 4- Engine revolution- Transverse acceleration- Inserted gear- Engine status- Nominal parameters throttle valve- engine oil temperature- Air mass, nominal value- Turbo pressure, nominal value- Turbo pressure, actual value- Intake air temperature- Engine oil level- Torque limitation- Oxygen sensor voltage (bank 1-sensor 1)- Oxygen sensor voltage (bank 1-sensor 2)- Set value, high fuel pressure- Fuel level (quantity)- Short-term mixture correction, bank 1- Long-term mixture correction, bank 1- Cooling agent temperature motor- Idle running speed target value- Gas pedal position sensor 1 Voltage- Gas pedal position sensor 2 Voltage- Longitudinal acceleration- Rate correction factor- Tempomat speed (required value)- Lambda probe heating resistance (B1, S1)- Lambda probe heating resistance (B1, S2)

- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
- factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass
meter
- Air leakage

2009/03 - 2012/10	CAVF	1.4	150	Engine control Motronic MED 17.5 UDS	<ul style="list-style-type: none"> - Long-term throttle valve adaptation to air mass meter - Charge-air pressure control: set value - Intake manifold pressure, raw value - Ignition timing adjustment, cyl. 1 - Absolute suction pressure - Equivalence ratio: set value - Mileage since fault memory cleared - Distance covered with active MIL - Status, initial filling, fuel tank - Time since engine start - Absolute load value - Standardised load rating - Starter control: Interlock or P/N signal - Average injection time - Engine start: start synchronisation - Camshaft position: Start of phase window - Accelerator switch positions - Auxiliary system torque request - ACC specified acceleration - Evap.emiss.ctrl. control valve: specified position - Test steps still to be implemented - Long-term mixture correction/idle (B1) - Crankshaft angle / quantity control valve closed - Crankshaft angle / quantity control valve opened - Fuel HP regulation: Adaptation value - High pressure fuel pump: delivery volume - Total vehicle mileage - Total control unit mileage - Torque loss adaptation: Idle - Adaptation A/C compressor torque power loss - Adaptation of transmission torque power loss - Adaptation transmission and compressor torque power loss - Ignition angle retard: mean value - Reference moment, misfire detection - EVAP system: adaptation factor - Irregular CU deactivations: counter reading - Compressor control flap actuation - EVAP diagnosis: actuation duty cycle - EVAP diagnosis: differential pressure ratio - EVAP diagnosis: Result correlation factor - Knock sensor test: short trip result - Idle speed control: Requested torque change - Long-term adjustment LR bank 1 - Load value: set value - Fuel pump: set value - Kick-down shift point adaptation - Inlet camshaft timing actuation (b1) - Level detection test result - Camshaft actuator actual/specified angle difference - Calculated torque reduction on transmission intervention - Internal torque set value formation - Compressor test - Accelerator pedal travel - Accelerator pedal position 2 - Test EVAP valve: Result - Inlet camshaft control test (b1): result - Number of invalid keys - Acceleration interface, braking torque set value - Exhaust gas mass flow (b1,s1), filtered value - Requested specified idling speed - Fuel high pressure: regulator output value - Exhaust gas temperature sensor 2, calculated - OBD: Request for this vehicle - Accelerator pedal: limitation
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					<ul style="list-style-type: none"> - Throttle valve air mass flow - Knock sensor voltage Cylinder 1 - Knock sensor voltage Cylinder 2 - Knock sensor voltage Cylinder 3 - Knock sensor voltage Cylinder 4 - CAM: Deviation from reference position - Magnetic clutch actuation duty cycle - A/C compressor refrigerant pressure - Compressor control flap: actual/specified angle difference - ESP reduced required torque - ESP increased required torque - Oxygen sensor heating (B1, S1), actuation - Oxygen sensor heating (B1, S2), actuation - Fuel low pressure: Adaptation value - Drive specified torque - Crankshaft specified torque - Lambda control (b1): Part load adaptation value - Brake booster pressure raw value - Temperature sensor 1 compressor 2, raw value - Dew point, heat quantity (b1,s1), model value - Dew point, heat quantity (b1,s2), model value - Dew point end, counter start (b1,s1) - Dew point end, counter start (b1,s2) - Brake booster pressure actual value - Pressure upstream of charging module, raw value - Brake booster pump test: Result - Lateral acceleration raw value - Intake manifold intake air temperature, raw value - Intake air temperature upstream of throttle valve: raw value - Time since terminal 15 off - Combustion chamber air charge: Set value - Brake booster vacuum - Travel time with MIL activated - Brake booster vacuum pump - Lambda control deactivation - Exh. gas temperat. sensor (bank 1, sensor 1) - Camshaft speed - Throttle valve position 2 - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Coolant temp. at engine start - Magnetic clutch monitoring - Temperature sensor downstream of radiator: <p>Raw voltage</p> <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1

- Lambda sensor ageing (bank 1, sensor 1)
- Lambda probe ageing (B1, S2)
- Evaporative emission control regeneration valve
- Camshaft timing control (B1), inlet
- **Adjustments / settings**
 - Adaptive parameters reset
 - Basic adjustment throttle valve
 - Activate/deactivate cruise control
 - Compressor magnetic clutch basic setting
 - Compressor control flap basic setting
 - Activate/deactivate passenger compartment supplementary heater
- **Special functions**
 - Fuel tank emptying
 - Bleeding fuel system
 - Fuel pressure reduction
- **Error memory**
- **Current values**
 - Fuel pressure
 - Vehicle driving speed
 - Accelerator pedal position
 - Fuel temperature
 - Battery voltage
 - Fuel consumption
 - Ignition angle reduction: cyl. 1
 - Ignition angle reduction: cyl. 2
 - Ignition angle reduction: cyl. 3
 - Ignition angle reduction: cyl. 4
 - Engine revolution
 - Transverse acceleration
 - Inserted gear
 - Engine status
 - Nominal parameters throttle valve
 - engine oil temperature
 - Air mass, nominal value
 - Turbo pressure, nominal value
 - Turbo pressure, actual value
 - Intake air temperature
 - Engine oil level
 - Torque limitation
 - Oxygen sensor voltage (bank 1-sensor 1)
 - Oxygen sensor voltage (bank 1-sensor 2)
 - Set value, high fuel pressure
 - Fuel level (quantity)
 - Short-term mixture correction, bank 1
 - Long-term mixture correction, bank 1
 - Cooling agent temperature motor
 - Idle running speed target value
 - Gas pedal position sensor 1 Voltage
 - Gas pedal position sensor 2 Voltage
 - Longitudinal acceleration
 - Rate correction factor
 - Tempomat speed (required value)
 - Lambda probe heating resistance (B1, S1)
 - Lambda probe heating resistance (B1, S2)
 - Radiator fan 1 control
 - "Oil minimum" warning
 - Engine torque
 - Ambient temperature
 - Engine operating status
 - Brake pressure
 - Exhaust gas temperature (bank 1, sensor 1)
 - Missing detection counter
 - Basic setting status
 - Brake status
 - Generator charge signal
 - Power supply Clamp 30
 - Kickdown switch status

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Engine control
Motronic MED 17.5 UDS

- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
 - Oxygen sensor (b1,s2): Ri limit value
 - Oxygen sensor (b1,s1): characteristics offset
 - Oxygen sensor (b1,S1) fast offset adaptation:
counter
 - Oxygen sensor (b1,s1): Ceramics temperature
 - Oxygen sensor ageing check (S2): result
 - Operating instructions
 - Catalytic converter O2 capacity: measured
 - Catalytic converter O2 capacity: ageing corr.
- factor
 - Throttle valve position: absolute
 - Throttle valve position: standardised
 - Ambient air pressure
 - Conversion check: Measured value
 - Conversion check: Result
 - Torque loss adaption
 - Throttle valve adaption: Result
 - Short-term throttle valve adaption to air mass
meter
 - Air leakage
 - Long-term throttle valve adaptation to air mass
meter
 - Charge-air pressure control: set value
 - Intake manifold pressure, raw value
 - Ignition timing adjustment, cyl. 1
 - Absolute suction pressure
 - Equivalence ratio: set value
 - Mileage since fault memory cleared
 - Distance covered with active MIL
 - Status, initial filling, fuel tank
 - Time since engine start
 - Absolute load value
 - Standardised load rating

- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation

					<ul style="list-style-type: none"> - Oxygen sensor heating (B1, S2), actuation - Fuel low pressure: Adaptation value - Drive specified torque - Crankshaft specified torque - Lambda control (b1): Part load adaptation value - Brake booster pressure raw value - Temperature sensor 1 compressor 2, raw value - Dew point, heat quantity (b1,s1), model value - Dew point, heat quantity (b1,s2), model value - Dew point end, counter start (b1,s1) - Dew point end, counter start (b1,s2) - Brake booster pressure actual value - Pressure upstream of charging module, raw value - Brake booster pump test: Result - Lateral acceleration raw value - Intake manifold intake air temperature, raw value - Intake air temperature upstream of throttle valve: raw value - Time since terminal 15 off - Combustion chamber air charge: Set value - Brake booster vacuum - Travel time with MIL activated - Brake booster vacuum pump - Lambda control deactivation - Exh. gas temperat. sensor (bank 1, sensor 1) - Camshaft speed - Throttle valve position 2 - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Coolant temp. at engine start - Magnetic clutch monitoring - Temperature sensor downstream of radiator: Raw voltage • Actuators <ul style="list-style-type: none"> - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions

- Fuel tank emptying
- Bleeding fuel system
- Fuel pressure reduction
- **Error memory**
- **Current values**
- Fuel pressure
- Vehicle driving speed
- Accelerator pedal position
- Fuel temperature
- Battery voltage
- Fuel consumption
- Ignition angle reduction: cyl. 1
- Ignition angle reduction: cyl. 2
- Ignition angle reduction: cyl. 3
- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4

- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw

					<p>value</p> <ul style="list-style-type: none"> - Brake booster pump test: Result - Lateral acceleration raw value - Intake manifold intake air temperature, raw value - Intake air temperature upstream of throttle valve: <p>raw value</p> <ul style="list-style-type: none"> - Time since terminal 15 off - Combustion chamber air charge: Set value - Brake booster vacuum - Travel time with MIL activated - Brake booster vacuum pump - Lambda control deactivation - Exh. gas temperat. sensor (bank 1, sensor 1) - Camshaft speed - Throttle valve position 2 - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Coolant temp. at engine start - Magnetic clutch monitoring - Temperature sensor downstream of radiator: <p>Raw voltage</p> <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
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SEAT					Ibiza [6J8] ST - Ibiza ST 1.4 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position 	

- Fuel temperature
- Battery voltage
- Fuel consumption
- Ignition angle reduction: cyl. 1
- Ignition angle reduction: cyl. 2
- Ignition angle reduction: cyl. 3
- Ignition angle reduction: cyl. 4
- Engine revolution
- Transverse acceleration
- Inserted gear
- Engine status
- Nominal parameters throttle valve
- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap

- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value

					<ul style="list-style-type: none"> - Brake booster vacuum - Travel time with MIL activated - Brake booster vacuum pump - Lambda control deactivation - Exh. gas temperat. sensor (bank 1, sensor 1) - Camshaft speed - Throttle valve position 2 - Missfire detection counter Cylinder 1 - Missfire detection counter Cylinder 2 - Missfire detection counter Cylinder 3 - Missfire detection counter Cylinder 4 - Coolant temp. at engine start - Magnetic clutch monitoring - Temperature sensor downstream of radiator: <p>Raw voltage</p> <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear - Engine status - Nominal parameters throttle valve - engine oil temperature

- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:

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Engine control
Motronic MED 17.5 UDS

number

- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation: counter

- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.

factor

- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass

meter

- Air leakage
- Long-term throttle valve adaptation to air mass

meter

- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque

power loss

- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value

- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring

					<ul style="list-style-type: none"> - Temperature sensor downstream of radiator: Raw voltage • Actuators <ul style="list-style-type: none"> - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear - Engine status - Nominal parameters throttle valve - engine oil temperature - Air mass, nominal value - Turbo pressure, nominal value - Turbo pressure, actual value - Intake air temperature - Engine oil level - Torque limitation - Oxygen sensor voltage (bank 1-sensor 1) - Oxygen sensor voltage (bank 1-sensor 2) - Set value, high fuel pressure - Fuel level (quantity) - Short-term mixture correction, bank 1 - Long-term mixture correction, bank 1 - Cooling agent temperature motor

- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
factor
- Throttle valve position: absolute
- Throttle valve position: standardised

2012/04	CTHF	1.4	150	Engine control Motronic MED 17.5 UDS	<ul style="list-style-type: none"> - Ambient air pressure - Conversion check: Measured value - Conversion check: Result - Torque loss adaption - Throttle valve adaption: Result - Short-term throttle valve adaption to air mass meter - Air leakage - Long-term throttle valve adaptation to air mass meter - Charge-air pressure control: set value - Intake manifold pressure, raw value - Ignition timing adjustment, cyl. 1 - Absolute suction pressure - Equivalence ratio: set value - Mileage since fault memory cleared - Distance covered with active MIL - Status, initial filling, fuel tank - Time since engine start - Absolute load value - Standardised load rating - Starter control: Interlock or P/N signal - Average injection time - Engine start: start synchronisation - Camshaft position: Start of phase window - Accelerator switch positions - Auxiliary system torque request - ACC specified acceleration - Evap.emiss.ctrl. control valve: specified position - Test steps still to be implemented - Long-term mixture correction/idle (B1) - Crankshaft angle / quantity control valve closed - Crankshaft angle / quantity control valve opened - Fuel HP regulation: Adaptation value - High pressure fuel pump: delivery volume - Total vehicle mileage - Total control unit mileage - Torque loss adaptation: Idle - Adaptation A/C compressor torque power loss - Adaptation of transmission torque power loss - Adaptation transmission and compressor torque power loss - Ignition angle retard: mean value - Reference moment, misfire detection - EVAP system: adaptation factor - Irregular CU deactivations: counter reading - Compressor control flap actuation - EVAP diagnosis: actuation duty cycle - EVAP diagnosis: differential pressure ratio - EVAP diagnosis: Result correlation factor - Knock sensor test: short trip result - Idle speed control: Requested torque change - Long-term adjustment LR bank 1 - Load value: set value - Fuel pump: set value - Kick-down shift point adaptation - Inlet camshaft timing actuation (b1) - Level detection test result - Camshaft actuator actual/specified angle difference - Calculated torque reduction on transmission intervention - Internal torque set value formation - Compressor test - Accelerator pedal travel - Accelerator pedal position 2 - Test EVAP valve: Result - Inlet camshaft control test (b1): result
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- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring
- Temperature sensor downstream of radiator: Raw voltage
- **Actuators**
- Air conditioner electromagnetic clutch - compressor
- Turbo charger air circulation valve
- Inlet camshaft timing control (bank 1)
- Fuel quantity control valve
- Radiator fan controller 1
- Electric fuel pump control unit
- Compressor control flap
- Aux coolant pump
- Evaporative emission control regeneration valve

- Wastegate solenoid valve
- Actuator structure-borne noise

SEAT				Leon [1P1] - Leon 1.8 TSI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code

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CDA

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Tire control system
Tire pressure monitor 4.0

received

- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded

					<ul style="list-style-type: none"> - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT					Leon [1P1] - Leon 2.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment 	

- **Error memory**

- **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle,

2009/03
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2012/12

CEGA

2.0

170

Tire control system
Tire pressure monitor 4.0

partially loaded

- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle,

				<p>partially loaded</p> <ul style="list-style-type: none"> - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected

- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded

2010/05 - 2011/05	CFHC	2.0	140	Tire control system Tire pressure monitor 4.0	<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently
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				<p>monitored wheel set</p> <ul style="list-style-type: none"> - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7

2010/05
-
2012/12

CFJA

2.0

170

Tire control system
Tire pressure monitor 4.0

- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle,

partially loaded

- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified

				<p>pressure</p> <ul style="list-style-type: none"> - Rear right tire pressure sensor specified pressure <p>pressure</p> <ul style="list-style-type: none"> - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel

2011/06
-
2012/12

CLCB

2.0

140

Tire control system
Tire pressure monitor 4.0

position received

- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded

					<ul style="list-style-type: none"> - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT					Leon [1P1] - Leon 2.0 FSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings 	

- Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - CAN communication
 - Supply voltage term.30
 - Tire pressure monitoring status
 - Transportation mode
 - System status
 - Inflation pressure sensor 1 Temperature
 - Inflation pressure sensor 2 Temperature
 - Inflation pressure sensor 3 Temperature
 - Inflation pressure sensor 4 Temperature
 - Inflation pressure sensor 1 Sensor code
 - Inflation pressure sensor 2 Sensor code
 - Inflation pressure sensor 3 Sensor code
 - Inflation pressure sensor 4 Sensor code
 - Radio interference
 - Load status selected
 - Warning: Check front left tire pressure
 - Warning: Check front right tire pressure
 - Tire pressure sensor 1: Actual pressure
 - Tire pressure sensor 1: Specified pressure
 - Tire pressure sensor 1: Wheel position
 - Tire pressure sensor 2: Actual pressure
 - Tire pressure sensor 2: Specified pressure
 - Tire pressure sensor 2: Wheel position
 - Tire pressure sensor 3: Actual pressure
 - Tire pressure sensor 3: Specified pressure
 - Tire pressure sensor 3: Wheel position
 - Designation wheel set 1
 - Designation wheel set 2
 - Designation wheel set 3
 - Designation wheel set 4
 - Designation wheel set 5
 - Designation wheel set 6
 - Designation wheel set 7
 - Designation wheel set 8
 - Designation wheel set 9
 - Designation wheel set 10
 - Currently monitored wheel set
 - Designation of currently monitored wheel set
 - Warning: Front left tire flat
 - Warning: Front right tire flat
 - Warning: Rear left tire flat
 - Warning: Rear right tire flat
 - Designation wheel set 11
 - Vehicle speed CAN message
 - CAN message voltage terminal 30
 - Tire pressure sensor: Last actual temperature received
 - Tire pressure sensor: Last actual pressure received
 - Tire pressure monitor sensor: Last wheel position received
 - Tire pressure monitor sensor: Last sensor code received
 - Tire pressure sensor 4: Actual pressure
 - Tire pressure sensor 4: Specified pressure
 - Tire pressure sensor 4: Wheel position
 - Wheel set 1 specified pressure, front axle, partially loaded
 - Wheel set 1 specified pressure, front axle, fully loaded
 - Wheel set 1 specified pressure, rear axle, partially loaded
 - Wheel set 1 specified pressure, rear axle, fully loaded

2009/05
-
2012/12

CDLD

2.0

241

Tire control system
Tire pressure monitor 4.0

loaded

- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded

					<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT					Leon [1P1] - Leon 2.0 TFSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature 	

- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded

2009/06 - 2012/12	CCZB	2.0	211	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded
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					<ul style="list-style-type: none"> - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT					Leon [1P1] - Leon 2.0 TFSI Cupra	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure 	

2009/09
-
2012/12

CDLA

2.0

265

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle,

partially loaded

- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status

					<ul style="list-style-type: none"> - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT				Leon [1P1] - Leon 1.6	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8

2009/12 - 2012/12	CHGA	1.6	102	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded
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- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure

				<ul style="list-style-type: none"> - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code

2010/11
-
2012/12

CMXA

1.6

102

Tire control system
Tire pressure monitor 4.0

received

- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded

					<ul style="list-style-type: none"> - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT					Leon [1P1] - Leon 1.6 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified 	

pressure adjustment

• **Error memory**

• **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded

2010/02 - 2012/12	CAYC	1.6	105	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded
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				<ul style="list-style-type: none"> - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference

- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded

<p>2010/11 - 2012/12</p>	<p>CAYB</p>	<p>1.6</p>	<p>90</p>	<p>Tire control system Tire pressure monitor 4.0</p>	<ul style="list-style-type: none"> - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low
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					<ul style="list-style-type: none"> - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT					Leon [1P1] - Leon 1.4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 	

<p>2010/05 - 2012/12</p>	<p>CGGB</p>	<p>1.4</p>	<p>86</p>	<p>Tire control system Tire pressure monitor 4.0</p>	<ul style="list-style-type: none"> - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded
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- loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure

					<ul style="list-style-type: none"> - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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SEAT	Leon [1P1] - Leon 1.2 TSI
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat

2010/02
-
2012/12

CBZB

1.2

105

Tire control system
Tire pressure monitor 4.0

- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle,

partially loaded

- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

SEAT				Leon [5F1] - Leon 1.4 TSI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear - Engine status - Nominal parameters throttle valve - engine oil temperature - Air mass, nominal value - Turbo pressure, nominal value - Turbo pressure, actual value - Intake air temperature - Engine oil level - Torque limitation - Oxygen sensor voltage (bank 1-sensor 1) - Oxygen sensor voltage (bank 1-sensor 2) - Set value, high fuel pressure - Fuel level (quantity) - Short-term mixture correction, bank 1 - Long-term mixture correction, bank 1 - Cooling agent temperature motor - Idle running speed target value - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Longitudinal acceleration - Rate correction factor - Tempomat speed (required value) - Lambda probe heating resistance (B1, S1) - Lambda probe heating resistance (B1, S2) - Radiator fan 1 control - "Oil minimum" warning

Engine control
Motronic MED 17.5 UDS

- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
 - Oxygen sensor (b1,s2): Ri limit value
 - Oxygen sensor (b1,s1): characteristics offset
 - Oxygen sensor (b1,S1) fast offset adaptation:
counter
 - Oxygen sensor (b1,s1): Ceramics temperature
 - Oxygen sensor ageing check (S2): result
 - Operating instructions
 - Catalytic converter O2 capacity: measured
 - Catalytic converter O2 capacity: ageing corr.
factor
 - Throttle valve position: absolute
 - Throttle valve position: standardised
 - Ambient air pressure
 - Conversion check: Measured value
 - Conversion check: Result
 - Torque loss adaption
 - Throttle valve adaption: Result
 - Short-term throttle valve adaption to air mass
meter
 - Air leakage
 - Long-term throttle valve adaptation to air mass
meter

- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1

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<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 				

- Key switch position
- Ignition circuit windowbag driver's side
- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value

Airbag
Airbag AB 20 UDS

- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1:

					<p>Ohm value</p> <ul style="list-style-type: none"> - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side <p>2</p> <ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SEAT						Leon [5F1] - Leon 1.2 TSI					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear - Engine status - Nominal parameters throttle valve - engine oil temperature - Air mass, nominal value - Turbo pressure, nominal value 					

- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value

Engine control
Motronic MED 17.5 UDS

- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation: counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr. factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass meter
- Air leakage
- Long-term throttle valve adaptation to air mass meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)

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- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start
- Magnetic clutch monitoring
- Temperature sensor downstream of radiator: Raw voltage

	<ul style="list-style-type: none"> • Actuators - Air conditioner electromagnetic clutch - compressor - Turbo charger air circulation valve - Inlet camshaft timing control (bank 1) - Fuel quantity control valve - Radiator fan controller 1 - Electric fuel pump control unit - Compressor control flap - Aux coolant pump - Evaporative emission control regeneration valve - Wastegate solenoid valve - Actuator structure-borne noise
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value

Airbag
Airbag AB 20 UDS

- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit

					<ul style="list-style-type: none"> - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SEAT				Leon [5F1] - Leon 1.6 TDI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front

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Airbag
Airbag AB 20 UDS

- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status

- Right belt tensioner fault status
 - Driver side rollover protection trigger
 - Passenger side rollover protection trigger
 - Passenger side rollover protection trigger: Ohm value
 - Driver side rollover protection trigger: Ohm value
 - Right belt tensioner: Terminal 15
 - Right belt tensioner: Power supply
 - Right belt tensioner: Current input
 - Left belt tensioner: Current input
 - Left belt tensioner: Terminal 15
 - Left belt tensioner: Power supply
 - Left belt tensioner: Temperature
 - Right belt tensioner: Temperature
 - Left belt tensioner: tensioning cycle characteristic 1
 - Left belt tensioner: tensioning cycle characteristic 2
 - Left belt tensioner: tensioning cycle characteristic 3
 - Left belt tensioner: tensioning cycle characteristic 4
 - Right belt tensioner: tensioning cycle characteristic 1
 - Right belt tensioner: tensioning cycle characteristic 2
 - Right belt tensioner: tensioning cycle characteristic 3
 - Right belt tensioner: tensioning cycle characteristic 4
 - Driving profile selection functional status
 - Driving profile switching
 - HV battery ignition circuit open circuit
 - HV battery ignition circuit open circuit ohm value
 - Passenger side airbag exhaust valve ignition circuit
 - Passenger side airbag exhaust valve ign.circuit ohm value
 - Status: Key-operated switch contact 1
 - Status: Key-operated switch contact 2
 - Driver side rear belt tensioner ignition circuit
 - Passenger side rear belt tensioner ignition circuit
 - Driver side pedestrian protection trigger ignition circuit
 - Passenger side pedestrian protection trigger ignition circuit
 - Driver side front airbag ignition circuit 1: Ohm value
 - Driver side seat position sensor status
 - Passenger side front seat position sensor status
 - Supply voltage status
 - Rear driver side side airbag ignition circuit
 - Rear passenger side side airbag ignition circuit
 - Passenger side front airbag ignition circuit 1: Ohm value
 - Seat belt lock switch center 2 row
 - 2nd row, driver side, buckle switch
 - 2nd row, passenger side, buckle switch
 - Ignition circuit, Battery disconnection
 - 3rd row driver side buckle switch
 - 3rd row passenger side buckle switch
 - Seat occupied sensor fault status
 - Ignition circuit 2, belt tensioner, front driver side
 - Ignition circuit 2, belt tensioner, front passenger side
- **Actuators**

				<ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front <ul style="list-style-type: none"> - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front <ul style="list-style-type: none"> - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side <ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance <ul style="list-style-type: none"> - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value

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Airbag
Airbag AB 20 UDS

- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value

					<ul style="list-style-type: none"> - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SEAT					Leon [5F1] - Leon 2.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat 	

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value

- Driver side rollover protection trigger: Ohm

value

- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle

characteristic 1

- Left belt tensioner: tensioning cycle

characteristic 2

- Left belt tensioner: tensioning cycle

characteristic 3

- Left belt tensioner: tensioning cycle

characteristic 4

- Right belt tensioner: tensioning cycle

characteristic 1

- Right belt tensioner: tensioning cycle

characteristic 2

- Right belt tensioner: tensioning cycle

characteristic 3

- Right belt tensioner: tensioning cycle

characteristic 4

- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition

circuit

- Passenger side airbag exhaust valve ign.circuit
ohm value

- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition

circuit

- Passenger side pedestrian protection trigger

ignition circuit

- Driver side front airbag ignition circuit 1: Ohm

value

- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1:

Ohm value

- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side

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- Ignition circuit 2, belt tensioner, front passenger

side

• **Actuators**

- Failure lamp
- Collision signal
- Airbag indicator light OFF
- Activate component protection

- Crash signal/all belt tensioners
- Anti-roll bar triggering
- Vehicle conditioning

SEAT Leon [5F5] - Leon SC 1.2 TSI

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear - Engine status - Nominal parameters throttle valve - engine oil temperature - Air mass, nominal value - Turbo pressure, nominal value - Turbo pressure, actual value - Intake air temperature - Engine oil level - Torque limitation - Oxygen sensor voltage (bank 1-sensor 1) - Oxygen sensor voltage (bank 1-sensor 2) - Set value, high fuel pressure - Fuel level (quantity) - Short-term mixture correction, bank 1 - Long-term mixture correction, bank 1 - Cooling agent temperature motor - Idle running speed target value - Gas pedal position sensor 1 Voltage - Gas pedal position sensor 2 Voltage - Longitudinal acceleration - Rate correction factor - Tempomat speed (required value) - Lambda probe heating resistance (B1, S1)

- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value
- Oxygen sensor (b1,s1) dynamic checks:
number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation:
counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr.
- factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass
meter

Engine control
Motronic MED 17.5 UDS

- Air leakage
- Long-term throttle valve adaptation to air mass meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value
- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle

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- Accelerator pedal: limitation
 - Throttle valve air mass flow
 - Knock sensor voltage Cylinder 1
 - Knock sensor voltage Cylinder 2
 - Knock sensor voltage Cylinder 3
 - Knock sensor voltage Cylinder 4
 - CAM: Deviation from reference position
 - Magnetic clutch actuation duty cycle
 - A/C compressor refrigerant pressure
 - Compressor control flap: actual/specified angle difference
 - ESP reduced required torque
 - ESP increased required torque
 - Oxygen sensor heating (B1, S1), actuation
 - Oxygen sensor heating (B1, S2), actuation
 - Fuel low pressure: Adaptation value
 - Drive specified torque
 - Crankshaft specified torque
 - Lambda control (b1): Part load adaptation value
 - Brake booster pressure raw value
 - Temperature sensor 1 compressor 2, raw value
 - Dew point, heat quantity (b1,s1), model value
 - Dew point, heat quantity (b1,s2), model value
 - Dew point end, counter start (b1,s1)
 - Dew point end, counter start (b1,s2)
 - Brake booster pressure actual value
 - Pressure upstream of charging module, raw value
 - Brake booster pump test: Result
 - Lateral acceleration raw value
 - Intake manifold intake air temperature, raw value
 - Intake air temperature upstream of throttle valve: raw value
 - Time since terminal 15 off
 - Combustion chamber air charge: Set value
 - Brake booster vacuum
 - Travel time with MIL activated
 - Brake booster vacuum pump
 - Lambda control deactivation
 - Exh. gas temperat. sensor (bank 1, sensor 1)
 - Camshaft speed
 - Throttle valve position 2
 - Missfire detection counter Cylinder 1
 - Missfire detection counter Cylinder 2
 - Missfire detection counter Cylinder 3
 - Missfire detection counter Cylinder 4
 - Coolant temp. at engine start
 - Magnetic clutch monitoring
 - Temperature sensor downstream of radiator:
- Raw voltage
- **Actuators**
 - Air conditioner electromagnetic clutch - compressor
 - Turbo charger air circulation valve
 - Inlet camshaft timing control (bank 1)
 - Fuel quantity control valve
 - Radiator fan controller 1
 - Electric fuel pump control unit
 - Compressor control flap
 - Aux coolant pump
 - Evaporative emission control regeneration valve
 - Wastegate solenoid valve
 - Actuator structure-borne noise

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**

- Data registration
- Seat occupation detection
- Power supply Clamp 15
- Key switch position
- Ignition circuit windowbag driver's side
- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value

Airbag
Airbag AB 20 UDS

- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status

					<ul style="list-style-type: none"> - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: <p>Ohm value</p> <ul style="list-style-type: none"> - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side <p>2</p> <ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SEAT					Toledo [KG3] - Toledo 1.4 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Generate readiness code - catalytic system effectiveness, bank 1 - Lambda sensor ageing (bank 1, sensor 1) - Lambda probe ageing (B1, S2) - Evaporative emission control regeneration valve - Camshaft timing control (B1), inlet • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Basic adjustment throttle valve - Activate/deactivate cruise control - Compressor magnetic clutch basic setting - Compressor control flap basic setting - Activate/deactivate passenger compartment supplementary heater • Special functions <ul style="list-style-type: none"> - Fuel tank emptying - Bleeding fuel system - Fuel pressure reduction • Error memory • Current values <ul style="list-style-type: none"> - Fuel pressure - Vehicle driving speed - Accelerator pedal position - Fuel temperature - Battery voltage - Fuel consumption - Ignition angle reduction: cyl. 1 - Ignition angle reduction: cyl. 2 - Ignition angle reduction: cyl. 3 - Ignition angle reduction: cyl. 4 - Engine revolution - Transverse acceleration - Inserted gear - Engine status - Nominal parameters throttle valve 	

- engine oil temperature
- Air mass, nominal value
- Turbo pressure, nominal value
- Turbo pressure, actual value
- Intake air temperature
- Engine oil level
- Torque limitation
- Oxygen sensor voltage (bank 1-sensor 1)
- Oxygen sensor voltage (bank 1-sensor 2)
- Set value, high fuel pressure
- Fuel level (quantity)
- Short-term mixture correction, bank 1
- Long-term mixture correction, bank 1
- Cooling agent temperature motor
- Idle running speed target value
- Gas pedal position sensor 1 Voltage
- Gas pedal position sensor 2 Voltage
- Longitudinal acceleration
- Rate correction factor
- Tempomat speed (required value)
- Lambda probe heating resistance (B1, S1)
- Lambda probe heating resistance (B1, S2)
- Radiator fan 1 control
- "Oil minimum" warning
- Engine torque
- Ambient temperature
- Engine operating status
- Brake pressure
- Exhaust gas temperature (bank 1, sensor 1)
- Missing detection counter
- Basic setting status
- Brake status
- Generator charge signal
- Power supply Clamp 30
- Kickdown switch status
- Inlet camshaft timing, bank 1 (spec.)
- Inlet camshaft timing, bank 1 (actual)
- Inlet camshaft adaptation, bank 1, phase angle
- Radiator outlet coolant temp. (act.)
- Radiator outlet coolant temp.(spec.)
- Fuel low pressure: Set value
- Acceleration
- ACC switch setting
- Fuel high pressure deviation
- Misfirings per 1000 revolutions, cyl. 1
- Misfirings per 1000 revolutions, cyl. 2
- Misfirings per 1000 revolutions, cyl. 3
- Misfirings per 1000 revolutions, cyl. 4
- Misfiring detection status
- Relative load value
- Lambda sensor test result, bank 1
- Desired transmission torque
- Throttle valve angle 1 adaption
- Throttle valve angle 2 adaption
- Throttle angle 1 adaption: Emergency air gap
- Throttle angle 2 adaption: Emergency air gap
- Dew point end adaptation status
- CAN timeout counter parking brake
- CAN timeout counter Gateway
- CAN timeout counter steering angle
- CAN timeout counter transmission
- A/C compressor torque request
- Crankshaft signal evaluation status
- Testing oxygen sensor ageing (b1/3,s1): result
- Oxygen sensor operational readiness (S2)
- Testing, oxygen sensor bank 1: Delta-lambda
- Lambda control test
- Lambda sensor (B1, S1), set value

Engine control
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- Oxygen sensor (b1,s1) dynamic checks: number
- Oxygen sensor (b1,s2): Ri limit value
- Oxygen sensor (b1,s1): characteristics offset
- Oxygen sensor (b1,S1) fast offset adaptation: counter
- Oxygen sensor (b1,s1): Ceramics temperature
- Oxygen sensor ageing check (S2): result
- Operating instructions
- Catalytic converter O2 capacity: measured
- Catalytic converter O2 capacity: ageing corr. factor
- Throttle valve position: absolute
- Throttle valve position: standardised
- Ambient air pressure
- Conversion check: Measured value
- Conversion check: Result
- Torque loss adaption
- Throttle valve adaption: Result
- Short-term throttle valve adaption to air mass meter
- Air leakage
- Long-term throttle valve adaptation to air mass meter
- Charge-air pressure control: set value
- Intake manifold pressure, raw value
- Ignition timing adjustment, cyl. 1
- Absolute suction pressure
- Equivalence ratio: set value
- Mileage since fault memory cleared
- Distance covered with active MIL
- Status, initial filling, fuel tank
- Time since engine start
- Absolute load value
- Standardised load rating
- Starter control: Interlock or P/N signal
- Average injection time
- Engine start: start synchronisation
- Camshaft position: Start of phase window
- Accelerator switch positions
- Auxiliary system torque request
- ACC specified acceleration
- Evap.emiss.ctrl. control valve: specified position
- Test steps still to be implemented
- Long-term mixture correction/idle (B1)
- Crankshaft angle / quantity control valve closed
- Crankshaft angle / quantity control valve opened
- Fuel HP regulation: Adaptation value
- High pressure fuel pump: delivery volume
- Total vehicle mileage
- Total control unit mileage
- Torque loss adaptation: Idle
- Adaptation A/C compressor torque power loss
- Adaptation of transmission torque power loss
- Adaptation transmission and compressor torque power loss
- Ignition angle retard: mean value
- Reference moment, misfire detection
- EVAP system: adaptation factor
- Irregular CU deactivations: counter reading
- Compressor control flap actuation
- EVAP diagnosis: actuation duty cycle
- EVAP diagnosis: differential pressure ratio
- EVAP diagnosis: Result correlation factor
- Knock sensor test: short trip result
- Idle speed control: Requested torque change
- Long-term adjustment LR bank 1
- Load value: set value

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- Fuel pump: set value
- Kick-down shift point adaptation
- Inlet camshaft timing actuation (b1)
- Level detection test result
- Camshaft actuator actual/specified angle difference
- Calculated torque reduction on transmission intervention
- Internal torque set value formation
- Compressor test
- Accelerator pedal travel
- Accelerator pedal position 2
- Test EVAP valve: Result
- Inlet camshaft control test (b1): result
- Number of invalid keys
- Acceleration interface, braking torque set value
- Exhaust gas mass flow (b1,s1), filtered value
- Requested specified idling speed
- Fuel high pressure: regulator output value
- Exhaust gas temperature sensor 2, calculated
- OBD: Request for this vehicle
- Accelerator pedal: limitation
- Throttle valve air mass flow
- Knock sensor voltage Cylinder 1
- Knock sensor voltage Cylinder 2
- Knock sensor voltage Cylinder 3
- Knock sensor voltage Cylinder 4
- CAM: Deviation from reference position
- Magnetic clutch actuation duty cycle
- A/C compressor refrigerant pressure
- Compressor control flap: actual/specified angle difference
- ESP reduced required torque
- ESP increased required torque
- Oxygen sensor heating (B1, S1), actuation
- Oxygen sensor heating (B1, S2), actuation
- Fuel low pressure: Adaptation value
- Drive specified torque
- Crankshaft specified torque
- Lambda control (b1): Part load adaptation value
- Brake booster pressure raw value
- Temperature sensor 1 compressor 2, raw value
- Dew point, heat quantity (b1,s1), model value
- Dew point, heat quantity (b1,s2), model value
- Dew point end, counter start (b1,s1)
- Dew point end, counter start (b1,s2)
- Brake booster pressure actual value
- Pressure upstream of charging module, raw value
- Brake booster pump test: Result
- Lateral acceleration raw value
- Intake manifold intake air temperature, raw value
- Intake air temperature upstream of throttle valve: raw value
- Time since terminal 15 off
- Combustion chamber air charge: Set value
- Brake booster vacuum
- Travel time with MIL activated
- Brake booster vacuum pump
- Lambda control deactivation
- Exh. gas temperat. sensor (bank 1, sensor 1)
- Camshaft speed
- Throttle valve position 2
- Missfire detection counter Cylinder 1
- Missfire detection counter Cylinder 2
- Missfire detection counter Cylinder 3
- Missfire detection counter Cylinder 4
- Coolant temp. at engine start

- Magnetic clutch monitoring
- Temperature sensor downstream of radiator:

Raw voltage

• Actuators

- Air conditioner electromagnetic clutch - compressor
- Turbo charger air circulation valve
- Inlet camshaft timing control (bank 1)
- Fuel quantity control valve
- Radiator fan controller 1
- Electric fuel pump control unit
- Compressor control flap
- Aux coolant pump
- Evaporative emission control regeneration valve
- Wastegate solenoid valve
- Actuator structure-borne noise

• Identification

• Clear errors

• Error memory

• Current values

- Data registration
- Seat occupation detection
- Power supply Clamp 15
- Key switch position
- Ignition circuit windowbag driver's side
- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm

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value
- Passenger side windowbag ignition circuit: Ohm value
value
- Driver side front kneebag ignition circuit: Ohm value
value
- Passenger side front kneebag ignition circuit: Ohm value
value
- Driver side front belt tensioner ign.circuit: Ohm value
value
- Passenger side front belt tensioner ign.circuit: Ohm value
value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
value
- Driver side front belt force limiter ign.circuit: Ohm value
value
- Passenger side front belt force limiter ign.circuit: Ohm value
value
- Driver side rear belt tensioner ign.circuit: Ohm value
value
- Passenger side rear belt tensioner ign.circuit: Ohm value
value
- Battery isolator ignition circuit: Ohm value
value
- Driver side front seat position sensor: Current value
value
- Passenger side front seat position sensor: Current value
value
- Driver side 2nd row belt switch: Ohm value
value
- Passenger side 2nd row belt switch: Ohm value
value
- 2nd row center belt switch: Ohm value
value
- Driver side 3rd row belt switch: Ohm value
value
- Passenger side 3rd row belt switch: Ohm value
value
- Driver side front buckle switch: Ohm value
value
- Passenger side front buckle switch: Ohm value
value
- Seat occupied sensor: Ohm value
value
- Driving profile selection system status
value
- Left belt tensioner fault status
value
- Right belt tensioner fault status
value
- Driver side rollover protection trigger
value
- Passenger side rollover protection trigger
value
- Passenger side rollover protection trigger: Ohm value
value
- Driver side rollover protection trigger: Ohm value
value
- Right belt tensioner: Terminal 15
value
- Right belt tensioner: Power supply
value
- Right belt tensioner: Current input
value
- Left belt tensioner: Current input
value
- Left belt tensioner: Terminal 15
value
- Left belt tensioner: Power supply
value
- Left belt tensioner: Temperature
value
- Right belt tensioner: Temperature
value
- Left belt tensioner: tensioning cycle characteristic 1
value
- Left belt tensioner: tensioning cycle characteristic 2
value
- Left belt tensioner: tensioning cycle characteristic 3
value
- Left belt tensioner: tensioning cycle characteristic 4
value
- Right belt tensioner: tensioning cycle characteristic 1
value
- Right belt tensioner: tensioning cycle characteristic 2
value
- Right belt tensioner: tensioning cycle characteristic 3
value
- Right belt tensioner: tensioning cycle characteristic 4

					<ul style="list-style-type: none"> - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SEAT				Toledo [KG3] - Toledo 1.2	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front

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Airbag
Airbag AB 20 UDS

- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value

- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side

					<ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SEAT	Toledo [KG3] - Toledo 1.2 TSI
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value

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					<ul style="list-style-type: none"> - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SEAT				Toledo [KG3] - Toledo 1.6 TDI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front

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Airbag
Airbag AB 20 UDS

- Ignition circuit side airbag front passenger side front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value

- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side

					<ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SEAT	Toledo [KG3] - Toledo 1.6
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value

2012/07 -	CFNA	1.6	105	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4
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					<ul style="list-style-type: none"> - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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[Octavia \[1Z3\] - Octavia 1.4](#)
[Octavia \[1Z3\] - Octavia 1.6](#)
[Octavia \[1Z3\] - Octavia 1.6 FSI](#)
[Octavia \[1Z3\] - Octavia 2.0 FSI](#)
[Octavia \[1Z3\] - Octavia 1.9 TDI](#)
[Octavia \[1Z3\] - Octavia 2.0 TDI](#)
[Octavia \[1Z3\] - Octavia 2.0 RS](#)
[Octavia \[1Z3\] - Octavia 1.9 TDI 4x4](#)
[Octavia \[1Z3\] - Octavia 2.0 FSI 4x4](#)
[Octavia \[1Z3\] - Octavia 2.0 TDI RS](#)
[Octavia \[1Z3\] - Octavia 1.8 TSI](#)
[Octavia \[1Z3\] - Octavia 1.6 TDI](#)
[Octavia \[1Z3\] - Octavia 1.4 TSI](#)
[Octavia \[1Z3\] - Octavia 1.2 TSI](#)
[Octavia \[1Z3\] - Octavia 2.0 TDI 4x4](#)
[Octavia \[1Z3\] - Octavia 2.0 TSI RS](#)
[Octavia \[1Z5\] Combi - Octavia 2.0 FSI Combi 4x4](#)
[Octavia \[1Z5\] Combi - Octavia 1.9 TDI Combi 4x4](#)
[Octavia \[1Z5\] Combi - Octavia 1.9 TDI Combi](#)
[Octavia \[1Z5\] Combi - Octavia 1.4 Combi](#)
[Octavia \[1Z5\] Combi - Octavia 1.6 Combi](#)
[Octavia \[1Z5\] Combi - Octavia 1.6 FSI Combi](#)
[Octavia \[1Z5\] Combi - Octavia 2.0 TDI Combi](#)
[Octavia \[1Z5\] Combi - Octavia 2.0 FSI Combi](#)
[Octavia \[1Z5\] Combi - Octavia 2.0 Combi RS](#)
[Octavia \[1Z5\] Combi - Octavia 2.0 TDI Combi 4x4](#)
[Octavia \[1Z5\] Combi - Octavia 2.0 TDI Combi RS](#)
[Octavia \[1Z5\] Combi - Octavia 1.8 TSI Combi](#)
[Octavia \[1Z5\] Combi - Octavia 1.6 TDI Combi](#)
[Octavia \[1Z5\] Combi - Octavia 1.4 TSI Combi](#)
[Octavia \[1Z5\] Combi - Octavia 1.8 TSI Combi 4x4](#)
[Octavia \[1Z5\] Combi - Octavia 1.2 TSI Combi](#)
[Octavia \[1Z5\] Combi - Octavia 1.6 TDI Combi 4x4](#)
[Octavia \[1Z5\] Combi - Octavia 2.0 TSI Combi RS](#)
[Octavia \[5E3\] - Octavia 1.4 TSI](#)
[Octavia \[5E3\] - Octavia 1.8 TSI](#)
[Octavia \[5E3\] - Octavia 1.2 TSI](#)
[Octavia \[5E3\] - Octavia 2.0 TDI](#)
[Octavia \[5E3\] - Octavia 1.6 TDI](#)
[Octavia \[5E5\] Combi - Octavia 1.2 TSI Combi](#)
[Octavia \[5E5\] Combi - Octavia 1.4 TSI Combi](#)
[Octavia \[5E5\] Combi - Octavia 1.6 TDI Combi](#)
[Octavia \[5E5\] Combi - Octavia 1.8 TSI Combi](#)
[Octavia \[5E5\] Combi - Octavia 2.0 TDI Combi](#)
[Superb \[3T4\] - Superb 3.6 V6 4x4](#)
[Superb \[3T4\] - Superb 1.9 TDI](#)

[Superb \[3T4\] - Superb 2.0 TDI](#)
[Superb \[3T4\] - Superb 1.8 TSI](#)
[Superb \[3T4\] - Superb 1.4 TSI](#)
[Superb \[3T4\] - Superb 1.8 TSI 4x4](#)
[Superb \[3T4\] - Superb 2.0 TDI 4x4](#)
[Superb \[3T4\] - Superb 2.0 TSI](#)
[Superb \[3T4\] - Superb 1.6 TDI](#)
[Superb \[3T4\] - Superb 1.4i](#)
[Superb \[3T5\] Combi - Superb 1.4 TSI Combi](#)
[Superb \[3T5\] Combi - Superb 1.8 TSI Combi](#)
[Superb \[3T5\] Combi - Superb 1.8 TSI Combi 4x4](#)
[Superb \[3T5\] Combi - Superb 1.9 TDI Combi](#)
[Superb \[3T5\] Combi - Superb 2.0 TDI Combi](#)
[Superb \[3T5\] Combi - Superb 3.6 V6 Combi 4x4](#)
[Superb \[3T5\] Combi - Superb 2.0 TDI Combi 4x4](#)
[Superb \[3T5\] Combi - Superb 2.0 TSI Combi](#)
[Superb \[3T5\] Combi - Superb 1.6 TDI Combi](#)
[Superb \[3T8\] - Superb 2.0i](#)
[Yeti \[5L7\] - Yeti 2.0 TDI 4x4](#)
[Yeti \[5L7\] - Yeti 1.8 TSI 4x4](#)
[Yeti \[5L7\] - Yeti 1.2 TSI](#)
[Yeti \[5L7\] - Yeti 2.0 TDI](#)

Year	Engine	Liters	HP	System	Functions
2004/05 - 2010/12	BCA	1.4	75	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system <ul style="list-style-type: none"> - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2006/05 -	BUD	1.4	80	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle

					<ul style="list-style-type: none"> - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/11 -	CGGA	1.4	80	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA					Octavia [1Z3] - Octavia 1.6	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification 	

2004/05 - 2005/05	BGU	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2005/05 -	BSE	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light

					<ul style="list-style-type: none"> - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2007/11 - 2010/05	CCSA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions

2009/08 -	CHGA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/05 -	CMXA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit

					<ul style="list-style-type: none"> - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Octavia [1Z3] - Octavia 1.6 FSI

Year	Engine	Liters	HP	System	Functions
2004/05 - 2008/10	BLF	1.6	115	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA Octavia [1Z3] - Octavia 2.0 FSI

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding

2004/11 - 2005/11	BLR	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2004/12 - 2005/11	BLY	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway

					<ul style="list-style-type: none"> - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2005/11 - 2008/10	BVY	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA					Octavia [1Z3] - Octavia 1.9 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values 	

2004/05 - 2010/12	BJB	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2004/05 - 2006/02	BKC	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer

2006/05 - 2010/05	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - ESP indicator • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2006/03 -	BXE	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system

					<ul style="list-style-type: none"> - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA	Octavia [1Z3] - Octavia 2.0 TDI
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Year	Engine	Liters	HP	System	Functions
2004/05 - 2010/05	BKD	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration

2005/11 - 2010/05	BMM	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/03 -	CLCA	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button

					<ul style="list-style-type: none"> - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/02 -	CLCB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values

2010/05 -	CFHC	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2011/02 -	CFHF	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer

- ESP indicator

SKODA					
Octavia [1Z3] - Octavia 2.0 RS					
Year	Engine	Liters	HP	System	Functions
2005/10 - 2008/10	BWA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Brake pressure sensor zero pos. calibration- Lateral acceleration sensor zero position adjustment- Longitudinal acceleration sensor zero position adaptation- Steering angle initialization- Variant encoding• Special functions<ul style="list-style-type: none">- Bleed• Error memory• Current values<ul style="list-style-type: none">- stop lights switch- front left tire speed- front right tire speed- rear right tire speed- rear left tire speed- Transverse acceleration pressure sensor- Driving wheels angle- reflexive angle- Communication with engine management system- Longitudinal acceleration- Brakes control light- ABS control light- Tire monitoring, button- ESP button- Steering wheel angle sensor, status- Brake booster vacuum chamber- Brake booster working chamber- Communication with instrument panel- Commun. with strng. wh. angle sensor- Communication with gateway- Comm. with power strng. control unit- Communication with transmission control unit- Communication with 4WD system- Communication with access system/immobilizer- ESP indicator

SKODA					
Octavia [1Z3] - Octavia 1.9 TDI 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Brake pressure sensor zero pos. calibration- Lateral acceleration sensor zero position adjustment- Longitudinal acceleration sensor zero position adaptation- Steering angle initialization- Variant encoding• Special functions<ul style="list-style-type: none">- Bleed• Error memory• Current values

2006/05 - 2010/05	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA					
Octavia [1Z3] - Octavia 2.0 FSI 4x4					
Year	Engine	Liters	HP	System	Functions
2004/12 - 2005/11	BLX	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor

					<ul style="list-style-type: none"> - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2005/11 - 2008/10	BVX	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA					
Octavia [1Z3] - Octavia 2.0 TDI RS					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values

2006/04 - 2008/05	BMN	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2008/05 -	CEGA	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer

- ESP indicator

SKODA

Octavia [1Z3] - Octavia 1.8 TSI

Year	Engine	Liters	HP	System	Functions
2007/06 - 2008/10	BZB	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Brake pressure sensor zero pos. calibration- Lateral acceleration sensor zero position adjustment- Longitudinal acceleration sensor zero position adaptation- Steering angle initialization- Variant encoding• Special functions<ul style="list-style-type: none">- Bleed• Error memory• Current values<ul style="list-style-type: none">- stop lights switch- front left tire speed- front right tire speed- rear right tire speed- rear left tire speed- Transverse acceleration- pressure sensor- Driving wheels angle- reflexive angle- Communication with engine management system- Longitudinal acceleration- Brakes control light- ABS control light- Tire monitoring, button- ESP button- Steering wheel angle sensor, status- Brake booster vacuum chamber- Brake booster working chamber- Communication with instrument panel- Commun. with strng. wh. angle sensor- Communication with gateway- Comm. with power strng. control unit- Communication with transmission control unit- Communication with 4WD system- Communication with access system/immobilizer- ESP indicator
					<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Brake pressure sensor zero pos. calibration- Lateral acceleration sensor zero position adjustment- Longitudinal acceleration sensor zero position adaptation- Steering angle initialization- Variant encoding• Special functions<ul style="list-style-type: none">- Bleed• Error memory• Current values<ul style="list-style-type: none">- stop lights switch- front left tire speed- front right tire speed- rear right tire speed- rear left tire speed

2008/11 -	CDA A	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

Year	Engine	Liters	HP	System	Functions
2009/06 -	CAYC	1.6	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA Octavia [1Z3] - Octavia 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed

2008/11 -	CAXA	1.4	122	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA					
Octavia [1Z3] - Octavia 1.2 TSI					
Year	Engine	Liters	HP	System	Functions
2010/02 -	CBZB	1.2	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer

- ESP indicator

SKODA		Octavia [1Z3] - Octavia 2.0 TDI 4x4			
Year	Engine	Liters	HP	System	Functions
2010/05 -	CFHC	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Brake pressure sensor zero pos. calibration- Lateral acceleration sensor zero position adjustment- Longitudinal acceleration sensor zero position adaptation- Steering angle initialization- Variant encoding• Special functions<ul style="list-style-type: none">- Bleed• Error memory• Current values<ul style="list-style-type: none">- stop lights switch- front left tire speed- front right tire speed- rear right tire speed- rear left tire speed- Transverse acceleration- pressure sensor- Driving wheels angle- reflexive angle- Communication with engine management system- Longitudinal acceleration- Brakes control light- ABS control light- Tire monitoring, button- ESP button- Steering wheel angle sensor, status- Brake booster vacuum chamber- Brake booster working chamber- Communication with instrument panel- Commun. with strng. wh. angle sensor- Communication with gateway- Comm. with power strng. control unit- Communication with transmission control unit- Communication with 4WD system- Communication with access system/immobilizer- ESP indicator

SKODA		Octavia [1Z3] - Octavia 2.0 TSI RS			
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Brake pressure sensor zero pos. calibration- Lateral acceleration sensor zero position adjustment- Longitudinal acceleration sensor zero position adaptation- Steering angle initialization- Variant encoding• Special functions<ul style="list-style-type: none">- Bleed• Error memory• Current values

2008/11 -	CCZA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Octavia [1Z5] Combi - Octavia 2.0 FSI Combi 4x4					
Year	Engine	Liters	HP	System	Functions
2004/11 - 2005/11	BLX	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor

					<ul style="list-style-type: none"> - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2005/11 - 2008/10	BVX	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA Octavia [1Z5] Combi - Octavia 1.9 TDI Combi 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values

2004/11 -	BKC	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2006/05 - 2010/05	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer

					- ESP indicator
2006/03 -	BXE	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA					
Octavia [1Z5] Combi - Octavia 1.9 TDI Combi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed

2004/11 - 2006/02	BKC	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2004/05 - 2010/12	BJB	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

2006/05 - 2010/05	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2004/11 -	BXE	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button

					<ul style="list-style-type: none"> - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA	Octavia [1Z5] Combi - Octavia 1.4 Combi
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Year	Engine	Liters	HP	System	Functions
2004/05 - 2006/06	BCA	1.4	75	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation

2006/05 -	BUD	1.4	80	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/11 -	CGGA	1.4	80	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel

					<ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA	Octavia [1Z5] Combi - Octavia 1.6 Combi
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Year	Engine	Liters	HP	System	Functions
2004/05 - 2005/05	BGU	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory

2005/05 -	BSE	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Current values - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2007/11 - 2010/05	CCSA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions - Bleed • Error memory • Current values - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system

					<ul style="list-style-type: none"> - Communication with access system/immobilizer - ESP indicator
2009/08 -	CHGA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/05 -	CMXA	1.6	102	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management

					system <ul style="list-style-type: none"> - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Octavia [1Z5] Combi - Octavia 1.6 FSI Combi					
Year	Engine	Liters	HP	System	Functions
2004/05 - 2008/10	BLF	1.6	115	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system system <ul style="list-style-type: none"> - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

Year	Engine	Liters	HP	System	Functions
2004/05 - 2010/05	AZV	2.0	136	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2005/11 - 2010/05	BMM	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle

					<ul style="list-style-type: none"> - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/03 -	CLCA	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position

2010/02 -	CLCB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> adaptation <ul style="list-style-type: none"> - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/05 -	CFHC	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber

					<ul style="list-style-type: none"> - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2011/02 -	CFHF	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA					
Octavia [1Z5] Combi - Octavia 2.0 FSI Combi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed

2004/11 - 2005/11	BLR	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2004/12 - 2005/11	BLY	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit

					<ul style="list-style-type: none"> - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2005/11 - 2008/10	BVY	2.0	150	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA					Octavia [1Z5] Combi - Octavia 2.0 Combi RS	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed 	

2005/10 - 2008/10	BWA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Octavia [1Z5] Combi - Octavia 2.0 TDI Combi 4x4					
Year	Engine	Liters	HP	System	Functions
2005/12 - 2010/05	BMM	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit

					<ul style="list-style-type: none"> - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/05 -	CFHC	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2011/05 -	CFHF	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle

					<ul style="list-style-type: none"> - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Octavia [1Z5] Combi - Octavia 2.0 TDI Combi RS

Year	Engine	Liters	HP	System	Functions
2006/04 - 2008/05	BMN	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification

2008/05 -	CEGA	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Octavia [1Z5] Combi - Octavia 1.8 TSI Combi					
Year	Engine	Liters	HP	System	Functions
2007/06 - 2008/10	BZB	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle

					<ul style="list-style-type: none"> - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2008/11 -	CDA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment

2009/05 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA					
Octavia [1Z5] Combi - Octavia 1.6 TDI Combi					
Year	Engine	Liters	HP	System	Functions
2009/06 -	CAYC	1.6	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light

					<ul style="list-style-type: none"> - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA						Octavia [1Z5] Combi - Octavia 1.4 TSI Combi					
Year	Engine	Liters	HP	System		Functions					
2008/11 -	CAXA	1.4	122	Anti-block system ESP Teves Mk60.1		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator 					

SKODA						Octavia [1Z5] Combi - Octavia 1.8 TSI Combi 4x4					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification 					

2008/11 -	CDAA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light

					<ul style="list-style-type: none"> - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Octavia [1Z5] Combi - Octavia 1.2 TSI Combi					
Year	Engine	Liters	HP	System	Functions
2010/02 -	CBZB	1.2	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA Octavia [1Z5] Combi - Octavia 1.6 TDI Combi 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification

2009/06 -	CAYC	1.6	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Octavia [1Z5] Combi - Octavia 2.0 TSI Combi RS					
Year	Engine	Liters	HP	System	Functions
2008/11 -	CCZA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle

					<ul style="list-style-type: none"> - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA	Octavia [5E3] - Octavia 1.4 TSI
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front <ul style="list-style-type: none"> - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side side <ul style="list-style-type: none"> - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front <ul style="list-style-type: none"> - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side side <ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm

2012/11
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CHPA

1.4

140

Airbag
Airbag AB 20 UDS

value

- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle

					<p>characteristic 4</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 1</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 2</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 3</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 4</p> <ul style="list-style-type: none"> - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SKODA					Octavia [5E3] - Octavia 1.8 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side 	

- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- value

2012/11 -	CJSA	1.8	180	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value
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					<ul style="list-style-type: none"> - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side <p>2</p> <ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SKODA					Octavia [5E3] - Octavia 1.2 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side <p>front</p> <ul style="list-style-type: none"> - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side <p>side</p> <ul style="list-style-type: none"> - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side <p>front</p> <ul style="list-style-type: none"> - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side <p>side</p> <ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm 	

2012/11
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CJZA

1.2

105

Airbag
Airbag AB 20 UDS

value

- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle

					<p>characteristic 4</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 1</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 2</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 3</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 4</p> <ul style="list-style-type: none"> - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SKODA					Octavia [5E3] - Octavia 2.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side 	

- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value

2012/11 -	CKFB	2.0	143	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value
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					<ul style="list-style-type: none"> - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side <p>2</p> <ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SKODA					Octavia [5E3] - Octavia 1.6 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front <ul style="list-style-type: none"> - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side side <ul style="list-style-type: none"> - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front <ul style="list-style-type: none"> - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side side <ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side resistance <ul style="list-style-type: none"> - Driver side pedestrian protection ign.circuit - Passenger side pedestrian protection ign.circuit resistance <ul style="list-style-type: none"> - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value value <ul style="list-style-type: none"> - Passenger side front airbag ignition circuit 2: Ohm value Ohm value <ul style="list-style-type: none"> - Driver side front side airbag ignition circuit: Ohm 	

2012/11
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CLHA

1.6

105

Airbag
Airbag AB 20 UDS

value

- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle

					<p>characteristic 4</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 1</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 2</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 3</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 4</p> <ul style="list-style-type: none"> - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SKODA					Octavia [5E5] Combi - Octavia 1.2 TSI Combi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side 	

- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- value

2012/11 -	CJZA	1.2	105	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value
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					<ul style="list-style-type: none"> - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side <p>2</p> <ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SKODA	Octavia [5E5] Combi - Octavia 1.4 TSI Combi
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side <p>front</p> <ul style="list-style-type: none"> - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side <p>side</p> <ul style="list-style-type: none"> - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side <p>front</p> <ul style="list-style-type: none"> - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side <p>side</p> <ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm

2012/11
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CHPA

1.4

140

Airbag
Airbag AB 20 UDS

value

- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle

					<p>characteristic 4</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 1</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 2</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 3</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 4</p> <ul style="list-style-type: none"> - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SKODA					Octavia [5E5] Combi - Octavia 1.6 TDI Combi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side 	

- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- value

2012/11 -	CLHA	1.6	105	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value
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					<ul style="list-style-type: none"> - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side <p>2</p> <ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SKODA					Octavia [5E5] Combi - Octavia 1.8 TSI Combi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front <ul style="list-style-type: none"> - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side side <ul style="list-style-type: none"> - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front <ul style="list-style-type: none"> - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side side <ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side resistance <ul style="list-style-type: none"> - Driver side pedestrian protection ign.circuit - Passenger side pedestrian protection ign.circuit resistance <ul style="list-style-type: none"> - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value value <ul style="list-style-type: none"> - Passenger side front airbag ignition circuit 2: Ohm value Ohm value <ul style="list-style-type: none"> - Driver side front side airbag ignition circuit: Ohm 	

2012/11
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CJSA

1.8

180

Airbag
Airbag AB 20 UDS

value

- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle

					<p>characteristic 4</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 1</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 2</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 3</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 4</p> <ul style="list-style-type: none"> - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SKODA					Octavia [5E5] Combi - Octavia 2.0 TDI Combi	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side 	

- Ignition circuit windowbag front passenger's side
- Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
- Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
- Ignition circuit knee bag driver's side front
- Ignition circuit side airbag driver side front
- Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
- Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value

2012/11 -	CKFB	2.0	143	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value
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					<ul style="list-style-type: none"> - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side <p>2</p> <ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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SKODA					Superb [3T4] - Superb 3.6 V6 4x4	
Year	Engine	Liters	HP	System	Functions	
2008/11	CDVA	3.6	260	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration 	

					<ul style="list-style-type: none"> • Actuators • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
				Anti-block system ESP Teves Mk60.1	

SKODA					Superb [3T4] - Superb 1.9 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed 	

2008/03 - 2010/09	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2008/03 - 2010/11	BXE	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

Year	Engine	Liters	HP	System	Functions
2008/03 - 2010/03	BMP	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2008/06 - 2010/05	CBBB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management

					<ul style="list-style-type: none"> system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2009/01 - 2010/03	BKD	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system system <ul style="list-style-type: none"> - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation

2010/02 -	CLJA	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/03 -	CFFB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel

					<ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/05 -	CFGB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA					Superb [3T4] - Superb 1.8 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed 	

2008/03 - 2009/05	BZB	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2008/09 -	CDAA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit

					<ul style="list-style-type: none"> - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA					
Superb [3T4] - Superb 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed

2008/04 -	CAXC	1.4	125	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA						Superb [3T4] - Superb 1.8 TSI 4x4	
Year	Engine	Liters	HP	System	Functions		
2008/11 -	CDA A	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit 		

					<ul style="list-style-type: none"> - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA					
Superb [3T4] - Superb 2.0 TDI 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed

2008/09 - 2010/05	CBBB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/05 -	CFGB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification

2010/11 -	CFFB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Superb [3T4] - Superb 2.0 TSI					
Year	Engine	Liters	HP	System	Functions
2010/05 -	CCZA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle

					<ul style="list-style-type: none"> - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA					Superb [3T4] - Superb 1.6 TDI	
Year	Engine	Liters	HP	System	Functions	
2010/09 -	CAYC	1.6	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator 	

SKODA		Superb [3T4] - Superb 1.4i			
Year	Engine	Liters	HP	System	Functions
2010/05 -	CFB	1.4	131	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA		Superb [3T5] Combi - Superb 1.4 TSI Combi			
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed

2009/09 -	CAXC	1.4	125	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Superb [3T5] Combi - Superb 1.8 TSI Combi					
Year	Engine	Liters	HP	System	Functions
2009/09 -	CDA A	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit

					<ul style="list-style-type: none"> - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA Superb [3T5] Combi - Superb 1.8 TSI Combi 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed

2009/09 -	CDAA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2009/03 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

Year	Engine	Liters	HP	System	Functions
2009/09 - 2010/09	BLS	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2009/09 - 2010/11	BXE	1.9	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle

					<ul style="list-style-type: none"> - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Superb [3T5] Combi - Superb 2.0 TDI Combi

Year	Engine	Liters	HP	System	Functions
2009/09 - 2010/03	BKD	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification

<p>2009/09 - 2010/05</p>	<p>CBBB</p>	<p>2.0</p>	<p>170</p>	<p>Anti-block system ESP Teves Mk60.1</p>	<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
<p>2010/02 -</p>	<p>CLJA</p>	<p>2.0</p>	<p>140</p>	<p>Anti-block system ESP Teves Mk60.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light

					<ul style="list-style-type: none"> - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/03	CFFB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions

2010/05 -	CFGB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA					
Superb [3T5] Combi - Superb 3.6 V6 Combi 4x4					
Year	Engine	Liters	HP	System	Functions
2009/09 -	CDVA	3.6	260	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status

					<ul style="list-style-type: none"> - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Superb [3T5] Combi - Superb 2.0 TDI Combi 4x4

Year	Engine	Liters	HP	System	Functions
2009/09 - 2010/05	CBBB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding

2010/05 -	CFGB	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/11 -	CFFB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway

					<ul style="list-style-type: none"> - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA					
Superb [3T5] Combi - Superb 2.0 TSI Combi					
Year	Engine	Liters	HP	System	Functions
2010/05	CCZA	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA					
Superb [3T5] Combi - Superb 1.6 TDI Combi					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization

2010/09 -	CAYC	1.6	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA Superb [3T8] - Superb 2.0i					
Year	Engine	Liters	HP	System	Functions
2009/08 -	CGM	2.0	200	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button

					<ul style="list-style-type: none"> - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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SKODA	Yeti [5L7] - Yeti 2.0 TDI 4x4
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Year	Engine	Liters	HP	System	Functions
2009/05 - 2009/11	CBDB	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization

2009/11 -	CFHC	2.0	140	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2010/05 -	CFJA	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor

					<ul style="list-style-type: none"> - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2009/11 - 2010/05	CEGA	2.0	170	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator

SKODA					Yeti [5L7] - Yeti 1.8 TSI 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values 	

2009/05 -	CDAA	1.8	160	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
2009/11 -	CDAB	1.8	152	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Steering angle initialization - Variant encoding • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer

- ESP indicator

SKODA				Yeti [5L7] - Yeti 1.2 TSI	
Year	Engine	Liters	HP	System	Functions
2009/09 -	CBZB	1.2	105	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Brake pressure sensor zero pos. calibration- Lateral acceleration sensor zero position adjustment- Longitudinal acceleration sensor zero position adaptation- Steering angle initialization- Variant encoding• Special functions<ul style="list-style-type: none">- Bleed• Error memory• Current values<ul style="list-style-type: none">- stop lights switch- front left tire speed- front right tire speed- rear right tire speed- rear left tire speed- Transverse acceleration- pressure sensor- Driving wheels angle- reflexive angle- Communication with engine management system- Longitudinal acceleration- Brakes control light- ABS control light- Tire monitoring, button- ESP button- Steering wheel angle sensor, status- Brake booster vacuum chamber- Brake booster working chamber- Communication with instrument panel- Commun. with strng. wh. angle sensor- Communication with gateway- Comm. with power strng. control unit- Communication with transmission control unit- Communication with 4WD system- Communication with access system/immobilizer- ESP indicator

SKODA				Yeti [5L7] - Yeti 2.0 TDI	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Brake pressure sensor zero pos. calibration- Lateral acceleration sensor zero position adjustment- Longitudinal acceleration sensor zero position adaptation- Steering angle initialization- Variant encoding• Special functions<ul style="list-style-type: none">- Bleed• Error memory• Current values

2009/11 -	CFHA	2.0	110	Anti-block system ESP Teves Mk60.1	<ul style="list-style-type: none"> - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Transverse acceleration - pressure sensor - Driving wheels angle - reflexive angle - Communication with engine management system - Longitudinal acceleration - Brakes control light - ABS control light - Tire monitoring, button - ESP button - Steering wheel angle sensor, status - Brake booster vacuum chamber - Brake booster working chamber - Communication with instrument panel - Commun. with strng. wh. angle sensor - Communication with gateway - Comm. with power strng. control unit - Communication with transmission control unit - Communication with 4WD system - Communication with access system/immobilizer - ESP indicator
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TOYOTA

[4-Runner \[N18\] - 4-Runner 2.7](#)

[4-Runner \[N18\] - 4-Runner 2.7i](#)

[4-Runner \[N18\] - 4-Runner 3.4i](#)

[4-Runner \[N18\] - 4-Runner 2.7 4x4](#)

[4-Runner \[N21\] - 4-Runner 4.0i](#)

[4-Runner \[N21\] - 4-Runner 4.0i 4x4](#)

[4-Runner \[N21\] - 4-Runner 4.7i 4x4](#)

[4-Runner \[N21\] - 4-Runner 4.7i](#)

[Avalon - Avalon 3.0i 24V](#)

[Avalon - Avalon 3.0](#)

[Avalon \[MCX10R\] - Avalon 3.0i 24V](#)

[Avalon Verso - Avalon Verso 2.0 Diesel Turbo](#)

[Avalon Verso - Avalon Verso 2.0i 16V](#)

[Avalon Verso - Avalon Verso 2.4i 16V](#)

[Avalon \[T22\] - Avalon 1.6i 16V](#)

[Avalon \[T22\] - Avalon 1.8i 16V](#)

[Avalon \[T22\] - Avalon 2.0i 16V](#)

[Avalon \[T22\] - Avalon 2.0 Diesel Turbo](#)

[Avalon \[T22\] Liftback - Avalon 1.6i 16V Liftback](#)

[Avalon \[T22\] Liftback - Avalon 1.8i 16V Liftback](#)

[Avalon \[T22\] Liftback - Avalon 2.0i 16V Liftback](#)

[Avalon \[T22\] Liftback - Avalon 2.0 Diesel Turbo Liftback](#)

[Avalon \[T22\] Wagon - Avalon 1.6i 16V Wagon](#)

[Avalon \[T22\] Wagon - Avalon 1.8i 16V Wagon](#)

[Avalon \[T22\] Wagon - Avalon 2.0i 16V Wagon](#)

[Avalon \[T22\] Wagon - Avalon 2.0 Diesel Turbo Wagon](#)

[Avalon \[T25\] - Avalon 1.8i 16V](#)

[Avalon \[T25\] - Avalon 2.0i 16V](#)

[Avalon \[T25\] - Avalon 1.6i 16V](#)

[Avalon \[T25\] - Avalon 2.0i 16V 4WD](#)

[Avalon \[T25\] - Avalon 2.0 Diesel Turbo](#)

[Avalon \[T25\] - Avalon 2.4i](#)

[Avalon \[T25\] Liftback - Avalon 1.6i 16V Liftback](#)

[Avalon \[T25\] Liftback - Avalon 1.8i 16V Liftback](#)

[Avalon \[T25\] Liftback - Avalon 2.0i 16V Liftback](#)

[Avalon \[T25\] Liftback - Avalon 2.0 Diesel Turbo Liftback](#)

[Avalon \[T25\] Liftback - Avalon 2.4i Liftback](#)

[Avalon \[T25\] Wagon - Avalon 1.6i 16V Wagon](#)

[Avalon \[T25\] Wagon - Avalon 1.8i 16V Wagon](#)

[Avalon \[T25\] Wagon - Avalon 2.0i 16V Wagon](#)

[Avalon \[T25\] Wagon - Avalon 2.0i 16V 4WD Wagon](#)

[Avalon \[T25\] Wagon - Avalon 2.0 Diesel Turbo Wagon](#)

[Avalon \[T25\] Wagon - Avalon 2.4i Wagon](#)

[Avalon \[T27\] - Avalon 2.0](#)

[Aygo - Aygo 1.0](#)

[Camry - Camry 2.0i](#)

[Camry - Camry 2.2 CNG](#)
[Camry - Camry 2.2](#)
[Camry - Camry 2.0 i Sedan](#)
[Camry - Camry 2.2 i Sedan](#)
[Camry \[ACV36\] - Camry 2.4i](#)
[Camry \[ACV40\] - Camry 2.4i](#)
[Camry \[MCV20\] - Camry Vienta 3.0i](#)
[Camry \[MCV36\] - Camry 3.0i](#)
[Camry \[SXV20\] - Camry 2.2i](#)
[Camry \[V1\] - Camry 3.0 i Sedan](#)
[Camry \[V2\] - Camry 2.2i 16V](#)
[Camry \[V2\] - Camry 3.0i 24V](#)
[Camry \[V2\] - Camry 3.0i](#)
[Camry \[V2\] - Camry 2.2i](#)
[Camry \[V2\] Vienta Wagon - Camry Vienta Wagon 3.0i](#)
[Camry \[V2\] Wagon - Camry Wagon 3.0i](#)
[Camry \[V2\] Wagon - Camry Wagon 2.2i](#)
[Camry \[V3\] - Camry 3.0i 24V](#)
[Camry \[V3\] - Camry 2.4i 16V](#)
[Camry \[V3\] - Camry 2.0i 16V](#)
[Camry \[V3\] - Camry 2.4 i Sedan](#)
[Camry \[V3\] - Camry 3.0 i Sedan](#)
[Camry \[V3\] - Camry 2.4](#)
[Camry \[V3\] - Camry 2.4i](#)
[Camry \[V3\] - Camry 2.0i](#)
[Camry \[V3\] - Camry 3.0i](#)
[Camry \[V3\] - Camry 3.3](#)
[Camry \[V3\] Wagon - Camry Wagon 2.4i](#)
[Camry \[V40\] - Camry 2.4i](#)
[Camry \[V40\] - Camry 2.4i 4WD](#)
[Camry \[V4\] - Camry 2.4 VVT-i](#)
[Camry \[XV30\] - Camry 2.4i](#)
[Celica Convertible - Celica 2.2i 16V Convertible](#)
[Celica Coupe - Celica Coupe 1.8i](#)
[Celica Liftback - Celica Liftback 1.8i](#)
[Celica Liftback - Celica 1.8i 16V Liftback](#)
[Celica Liftback - Celica 2.2i 16V Liftback](#)
[Celica \[T23\] Coupe - Celica 1.8i 16V Coupe](#)
[Corolla - Corolla 1.8i](#)
[Corolla - Corolla 1.8 i](#)
[Corolla - Corolla 1.5i](#)
[Corolla Altis - New Corolla Altis 1.6i](#)
[Corolla Limo\[E12\] - Corolla Limo 1.6i](#)
[Corolla \[E10\] Van - Corolla Van 2.2 Diesel 4WD](#)
[Corolla \[E10\] Van - Corolla Van 2.2 Diesel](#)
[Corolla \[E10\] Wagon - Corolla Wagon 2.2 Diesel](#)
[Corolla \[E11, JT\] Liftback - Corolla 1.6i 16V Liftback](#)
[Corolla \[E11, JT\] Liftback - Corolla 1.9 Diesel Liftback](#)

[Corolla \[E11, JT\] Liftback - Corolla 1.4i 16V Liftback](#)
[Corolla \[E11, JT\] Liftback - Corolla 2.0 Diesel Turbo Liftback](#)
[Corolla \[E11, SB\] Liftback - Corolla 1.6i 16V Liftback](#)
[Corolla \[E11, SB\] Liftback - Corolla 1.9 Diesel Liftback](#)
[Corolla \[E11, SB\] Liftback - Corolla 1.4i 16V Liftback](#)
[Corolla \[E11\] - Corolla 1.6i 16V Sedan](#)
[Corolla \[E11\] - Corolla 1.8i 16V](#)
[Corolla \[E11\] - Corolla 1.8i 16V Sedan](#)
[Corolla \[E11\] - Corolla 1.9 Diesel](#)
[Corolla \[E11\] - Corolla 1.4i 16V Sedan](#)
[Corolla \[E11\] - Corolla 1.6 i](#)
[Corolla \[E11\] - Corolla 1.8 i](#)
[Corolla \[E11\] - Corolla 2.0 Diesel Turbo](#)
[Corolla \[E11\] - Corolla 1.6i](#)
[Corolla \[E11\] - Corolla 2.2 Diesel](#)
[Corolla \[E11\] - Corolla 2.2 Diesel 4WD](#)
[Corolla \[E11\] Hatchback - Corolla 1.6i 16V Hatchback](#)
[Corolla \[E11\] Hatchback - Corolla 1.9 Diesel Hatchback](#)
[Corolla \[E11\] Hatchback - Corolla 1.4i 16V Hatchback](#)
[Corolla \[E11\] Hatchback - Corolla 2.0 Diesel Turbo Hatchback](#)
[Corolla \[E11\] Wagon - Corolla 1.6i 16V Wagon](#)
[Corolla \[E11\] Wagon - Corolla 1.8i 16V Wagon 4x4](#)
[Corolla \[E11\] Wagon - Corolla 1.4i 16V Wagon](#)
[Corolla \[E11\] Wagon - Corolla 1.9 Diesel Wagon 4x4](#)
[Corolla \[E11\] Wagon - Corolla 2.0 Diesel Turbo Wagon](#)
[Corolla \[E11\] Wagon - Corolla 1.9 D Wagon](#)
[Corolla \[E12, JTD\] - Corolla 1.6i 16V](#)
[Corolla \[E12, JTD\] - Corolla 1.4i 16V](#)
[Corolla \[E12, JTD\] - Corolla 1.4 Diesel Turbo](#)
[Corolla \[E12, JTD\] Wagon - Corolla 1.6i 16V Wagon](#)
[Corolla \[E12, JTD\] Wagon - Corolla 1.4i 16V Wagon](#)
[Corolla \[E12, JTD\] Wagon - Corolla 2.0 Diesel Turbo Wagon](#)
[Corolla \[E12, NMT\] - Corolla 1.6i](#)
[Corolla \[E12, NMT\] - Corolla 2.0 Diesel Turbo](#)
[Corolla \[E12, NMT\] Wagon - Corolla 1.6i Wagon](#)
[Corolla \[E12, NMT\] Wagon - Corolla 1.4 Diesel Turbo Wagon](#)
[Corolla \[E12\] - Corolla 1.4 i](#)
[Corolla \[E12\] - Corolla 1.8 i](#)
[Corolla \[E12\] - Corolla 1.8i 16V Sedan](#)
[Corolla \[E12\] - Corolla 1.6i 16V Sedan](#)
[Corolla \[E12\] - Corolla 1.8](#)
[Corolla \[E12\] - Corolla 1.5i](#)
[Corolla \[E12\] - Corolla 1.6 i](#)
[Corolla \[E12\] - Corolla 2.0 Diesel Turbo Sedan](#)
[Corolla \[E12\] - Corolla 2.2 Diesel](#)
[Corolla \[E12\] Altis - Corolla Altis 1.6i](#)
[Corolla \[E12\] Altis - Corolla Altis 1.8i](#)
[Corolla \[E12\] Hatchback - Corolla 1.8i 16V Hatchback](#)

[Corolla \[E12\] Hatchback - Corolla 1.4i 16V Hatchback](#)
[Corolla \[E12\] Hatchback - Corolla 1.6i 16V Hatchback](#)
[Corolla \[E12\] Hatchback - Corolla 2.0 Diesel Turbo Hatchback](#)
[Corolla \[E12\] Hatchback - Corolla 1.4 Diesel Turbo Hatchback](#)
[Corolla \[E12\] Runx - Corolla RunX 1.4 i](#)
[Corolla \[E12\] Runx - Corolla RunX 1.8 i](#)
[Corolla \[E12\] Runx - Corolla RunX 1.6 i](#)
[Corolla \[E12\] Verso - Corolla Verso 1.8i 16V](#)
[Corolla \[E12\] Verso - Corolla Verso 1.6i 16V](#)
[Corolla \[E12\] Verso - Corolla Verso 2.0 Diesel Turbo](#)
[Corolla \[E12\] Wagon - Corolla 1.8i 16V Wagon](#)
[Corolla \[E9\] Wagon - Corolla 1.4 16V Wagon](#)
[Corolla \[R11\] Verso - Corolla Verso 1.8i 16V](#)
[Corolla \[R11\] Verso - Corolla Verso 1.6i 16V](#)
[Corolla \[R1\] Verso - Corolla Verso 1.6i 16V](#)
[Corolla \[R1\] Verso - Corolla Verso 1.8i 16V](#)
[Crown - Crown 2.5i](#)
[Crown - Crown 3.0i](#)
[Duet - Duet 1.0i](#)
[Duet - Duet 1.0i 4WD](#)
[Echo - Echo 1.5i 16V](#)
[Harrier - Harrier 3.3i 4WD](#)
[Hiace - Hiace 2.7](#)
[Hiace - Hiace 2.7 4x4](#)
[Highlander - Highlander 2.4](#)
[Highlander - Highlander 2.4 4x4](#)
[Highlander - Highlander 3.0](#)
[Highlander - Highlander 3.0 4x4](#)
[Highlander - Highlander 3.3 4x4](#)
[Highlander - Highlander 3.3](#)
[Highlander - Highlander 3.5 4x4](#)
[Highlander - Highlander 3.5](#)
[Hilux - Hilux 3.0 TD 4x4](#)
[Hilux - Hilux 3.0 Diesel Turbo 4x4](#)
[Hilux - Hilux 2.7i](#)
[Hilux - Hilux 3.4i](#)
[Hilux - Hilux 2.4 Diesel Turbo 4WD](#)
[Hilux - Hilux 2.0i 4WD](#)
[Hilux - Hilux 2.4i Pickup 4x4](#)
[Hilux Pickup - Hilux 2.4i Pickup 4x4](#)
[Hilux Pickup - Hilux 2.4i Pickup 4WD](#)
[Hilux Pickup - Hilux 2.4i Pickup](#)
[Hilux Pickup - Hilux 2.5 Diesel Turbo Pickup 4x4](#)
[Hilux Surf - Hilux Surf 3.0 Diesel Turbo 4WD](#)
[Hilux Surf - Hilux Surf 2.4 Diesel Turbo 4WD](#)
[Hilux Tiger - Hilux Tiger D4D 2.5 Diesel Turbo 4x4](#)
[Hilux Wagon - Hilux 3.0i Wagon](#)
[Hilux \[N25\] - Hilux 2.5 D-4D 4x4](#)

[Hilux \[N26\] - Hilux 3.0 D-4D 4x4](#)
[Hilux \[N35\] - Hilux 2.5 D-4D](#)
[Kluger - Kluger 3.3i](#)
[Land Cruiser - Land Cruiser 4.5i 4WD](#)
[Land Cruiser - Land Cruiser 4.7i 4WD](#)
[Land Cruiser - Land Cruiser 4.5 4x4](#)
[Land Cruiser Prado \[J12\] - Land Cruiser Prado 3.0 Diesel Turbo 4x4](#)
[Land Cruiser Prado \[J9\] - Land Cruiser Prado 3.4i 24V](#)
[Land Cruiser Prado \[J9\] - Land Cruiser Prado 2.7i 16V 4x4](#)
[Land Cruiser Prado \[J9\] - Land Cruiser Prado 3.0 Diesel Turbo 4x4](#)
[Land Cruiser \[J10\] - Land Cruiser 4.2 Diesel Turbo 4x4](#)
[Land Cruiser \[J10\] - Land Cruiser 4.5i 24V](#)
[Land Cruiser \[J20\] - Land Cruiser 4.6i 4x4](#)
[Land Cruiser \[J20\] - Land Cruiser 4.5 D-4D 4x4](#)
[Land Cruiser \[J6,J7,J10\] - Land Cruiser 4.7i 32V 4x4](#)
[Land Cruiser \[J6,J7,J10\] - Land Cruiser 4.7i 4x4](#)
[Land Cruiser \[J6,J7,J10\] - Land Cruiser 4.5 4x4](#)
[Land Cruiser \[J6,J7,J10\] - Land Cruiser 4.0](#)
[Land Cruiser \[J6,J7,J10\] - Land Cruiser 4.2 Diesel Turbo 4x4](#)
[Land Cruiser \[J7\] - Land Cruiser 4.5i 24V](#)
[Land Cruiser \[J7\] - Land Cruiser 4.2 Diesel 4x4](#)
[Land Cruiser \[J8\] - Land Cruiser 4.0i](#)
[Land Cruiser \[J8\] - Land Cruiser 4.5i 24V](#)
[Land Cruiser \[J8\] - Land Cruiser 4.0i 4x4](#)
[Land Cruiser \[J9\] - Land Cruiser 3.4i 24V](#)
[Land Cruiser \[J9\] - Land Cruiser 3.0 Diesel Turbo Intercooler](#)
[Land Cruiser \[J9\] - Land Cruiser 3.0 Diesel Turbo](#)
[MR2 \[W3\] Cabrio - MR2 1.8 16V Cabrio](#)
[Matrix - Matrix 1.8](#)
[Matrix - Matrix 1.8 4x4](#)
[Picnic - Picnic 2.0i](#)
[Picnic - Picnic 2.0i 16V](#)
[Picnic - Picnic 2.2 Diesel Turbo](#)
[Previa - Previa 2.4i 16V 4x4](#)
[Previa - Previa 2.4i](#)
[Previa - Previa 2.4i 16V](#)
[Previa - Previa 2.0 Diesel Turbo](#)
[Prius - Prius 1.5i](#)
[Prius \[W11\] - Prius 1.5i](#)
[Prius \[W20\] - Prius 1.5i](#)
[RAV4 - RAV4 2.0i 4WD](#)
[RAV4 - RAV4 1.8i](#)
[RAV4 - RAV4 2.4i 4x4](#)
[RAV4 - RAV4 2.4i](#)
[RAV4 - RAV4 2.4i 4WD](#)
[RAV4 - RAV4 2.0i 16V](#)
[RAV4 \[A1\] - RAV4 2.0i 16V 4x4](#)
[RAV4 \[A1\] Cabrio - RAV4 2.0i 16V Cabrio 4x4](#)

[RAV4 \[A2\] - RAV4 1.8i 16V](#)
[RAV4 \[A2\] - RAV4 2.0 VVT-i 4x4](#)
[RAV4 \[A2\] - RAV4 2.4i](#)
[RAV4 \[A2\] - RAV4 2.4i 4x4](#)
[RAV4 \[A2\] - RAV4 2.0 VVT-i](#)
[RAV4 \[A2\] - RAV4 2.0 Diesel Turbo](#)
[RAV4 \[A3\] - RAV4 2.4 4X4](#)
[RAV4 \[A3\] - RAV4 2.2 D-4D](#)
[RAV4 \[A3\] - RAV4 2.0](#)
[Reiz - Reiz 2.5i](#)
[Reiz - Reiz 3.0i](#)
[Sequoia - Sequoia 4.7](#)
[Sequoia - Sequoia 4.7 4x4](#)
[Sienna - Sienna 3.0](#)
[Sienna - Sienna 3.3](#)
[Sienna - Sienna 3.3 4x4](#)
[Sienna - Sienna 3.5](#)
[Solara Convertible - Solara 2.2 Convertible](#)
[Solara Convertible - Solara 3.0 Convertible](#)
[Solara Convertible - Solara 2.4 Convertible](#)
[Solara Convertible - Solara 3.3 Convertible](#)
[Solara Coupe - Solara 2.2 Coupe](#)
[Solara Coupe - Solara 3.0 Coupe](#)
[Solara Coupe - Solara 2.4 Coupe](#)
[Solara Coupe - Solara 3.3 Coupe](#)
[Soluna Vios - Soluna Vios 1.5i](#)
[Starlet \[P8\] - Starlet 1.3i 16V](#)
[Starlet \[P8\] - Starlet 1.3i 12V](#)
[Starlet \[P9\] - Starlet 1.3i 16V](#)
[Starlet \[P9\] - Starlet 1.3i 16V Turbo](#)
[T100 - T100 2.7i 4x4](#)
[Tacoma - Tacoma 2.4i](#)
[Tacoma - Tacoma 3.4](#)
[Tacoma - Tacoma 3.4 4x4](#)
[Tacoma - Tacoma 2.7 4x4](#)
[Tacoma - Tacoma 2.7i](#)
[Tacoma - Tacoma 4.0 4x4](#)
[Tacoma - Tacoma 2.7](#)
[Tacoma - Tacoma 2.4i 4x4](#)
[Tacoma - Tacoma 4.0](#)
[Tundra - Tundra 4.7](#)
[Tundra - Tundra 4.7 4x4](#)
[Tundra - Tundra 3.4](#)
[Tundra - Tundra 3.4 4x4](#)
[VIOS - VIOS 1.3i](#)
[VIOS - VIOS 1.5](#)
[VIOS - VIOS 1.5i](#)
[Wish - Wish 2.0i](#)

[Yaris - Yaris 1.0i 16V](#)

[Yaris - Yaris 1.3i 16V](#)

[Yaris - Yaris 1.5i 16V](#)

[Yaris - Yaris 1.3 VVT-i](#)

[Yaris Verso - Yaris Verso 1.5i 16V](#)

[Yaris Verso - Yaris Verso 1.3i 16V](#)

[Yaris \[P9, JTD\] - Yaris 1.0 VVT-i](#)

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve

1995/11
-
2000/08

3RZFE

2.7

152

Engine control
TCCS II V3

- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring

					<ul style="list-style-type: none"> - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				4-Runner [N18] - 4-Runner 2.7i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

Engine control

TCCS II V3

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve

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- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode

Gear box control
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					4-Runner [N18] - 4-Runner 3.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection 	

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported

Engine control
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2

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- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter

Gear box control
Transmission control ECT 2.2

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1

					<ul style="list-style-type: none"> - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **4-Runner [N18] - 4-Runner 2.7 4x4**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3)

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Engine control
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- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

					<ul style="list-style-type: none"> - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					4-Runner [N21] - 4-Runner 4.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control 	

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

Engine control
TCCS II V3

system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact

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- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position

Gear box control
Transmission control ECT 2.2

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

Engine control
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

2002/09	1GRFE	4.0	321	<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2
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Gear box control
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

					<ul style="list-style-type: none"> - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **4-Runner [N21] - 4-Runner 4.7i 4x4**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode

Engine control
TCCS II V3

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

2002/09 -	2UZFE	4.7	354	<ul style="list-style-type: none"> - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values 				

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Gear box control
Transmission control ECT 2.2

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil

					<ul style="list-style-type: none"> - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	4-Runner [N21] - 4-Runner 4.7i
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup

Engine control
TCCS II V3

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation

2002/09	2UZFE	4.7	354	<ul style="list-style-type: none"> - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1

Gear box control
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avalon - Avalon 3.0i 24V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch 	

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Engine control
TCCS II V3

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve

1994/09 - 1999/08	1MZFE	3.0	192	<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve

Gear box control
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

				<ul style="list-style-type: none"> - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

Engine control
TCCS II V3

- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve

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- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control

Gear box control
Transmission control ECT 2.2

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

					<ul style="list-style-type: none"> - Ingestion control valve
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system

Engine control
TCCS II V3

- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

1995/03 - 2000/02	1MZFE	3.0	200 - 214	<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve

Gear box control
Transmission control ECT 2.2

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Avalon - Avalon 3.0**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve

Engine control
TCCS II V3

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring

1998/09 - 2004/08	1MZFE	3.0	192	<ul style="list-style-type: none"> - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
				<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

Gear box control
Transmission control ECT 2.2

- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air

					<ul style="list-style-type: none"> - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Avalon [MCX10R] - Avalon 3.0i 24V
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement

Engine control
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

<p>2001/10 - 2002/12</p>	<p>1MZFE</p>	<p>3.0</p>	<p>197</p>	<ul style="list-style-type: none"> - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve <hr/> <ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve
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Gear box control
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

				<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2

Engine control
TCCS II V3

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

2003/01 - 2005/06	1MZFE	3.0	197	<ul style="list-style-type: none"> - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request

Gear box control
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

					<ul style="list-style-type: none"> - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time <p>• Actuators</p> <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis Verso - Avensis Verso 2.0 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 	

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

2001/05 - 2005/07	1CDFTV	2.0	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM
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					<ul style="list-style-type: none"> - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					
Avensis Verso - Avensis Verso 2.0i 16V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement

2001/05	1AZFE	2.0	150	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve
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- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve

					<ul style="list-style-type: none"> - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Avensis Verso - Avensis Verso 2.4i 16V**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3)

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

					<ul style="list-style-type: none"> - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T22] - Avensis 1.6i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle 	

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Engine control
TCCS II V3

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve

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- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)

Gear box control
Transmission control ECT 2.2

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test

- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay

					<ul style="list-style-type: none"> - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T22] - Avensis 1.8i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve 	

Engine control
TCCS II V3

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

2000/07 - 2003/01	1ZZFE	1.8	129	<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3)

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

				<ul style="list-style-type: none"> - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

1997/10 - 2000/07	7AFE	1.8	110	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve
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					<ul style="list-style-type: none"> - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T22] - Avensis 2.0i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position 	

Engine control
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

<p>2000/07 - 2003/01</p>	<p>1AZFSE</p>	<p>2.0</p>	<p>150</p>	<ul style="list-style-type: none"> - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time <p>• Actuators</p> <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve <p>• Functional tests</p> <ul style="list-style-type: none"> - Diagnosis/electronics test
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- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

Gear box control
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

				<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil

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Gear box control
Transmission control ECT 2.2

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1

					<ul style="list-style-type: none"> - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Avensis [T22] - Avensis 2.0 Diesel Turbo**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

				<ul style="list-style-type: none"> - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean

1999/08 - 2003/01	1CDFTV	2.0	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve
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					<ul style="list-style-type: none"> - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T22] Liftback - Avensis 1.6i 16V Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 	

Engine control
TCCS II V3

- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status

- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

Gear box control
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode

			<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
			<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2

1997/10 - 2000/07	4AFE	1.6	110	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

					<ul style="list-style-type: none"> - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Avensis [T22] Liftback - Avensis 1.8i 16V Liftback**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status

Engine control
TCCS II V3

- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring

2000/07 - 2003/01	1ZZFE	1.8	129	<ul style="list-style-type: none"> - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
				<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

Gear box control
Transmission control ECT 2.2

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve

				<ul style="list-style-type: none"> - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve

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Gear box control
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump

Engine control
TCCS II V3

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply

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- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve
 - EGR stepper motor
 - Variable valve timing Bank 2
 - Air control valve control motor
 - Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump

Gear box control
Transmission control ECT 2.2

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

				<ul style="list-style-type: none"> - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

					<ul style="list-style-type: none"> - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T22] Liftback - Avensis 2.0 Diesel Turbo Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 	

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

1997/10 - 2000/07	2CTE	2.0	90	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air
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				<ul style="list-style-type: none"> - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1

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Gear box control
Transmission control ECT 2.2

- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode

- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

Engine control
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

2000/07 - 2003/01	3ZZFE	1.6	110	<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2

Gear box control
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

				<ul style="list-style-type: none"> - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position

<p>1997/10 - 2000/07</p>	<p>4AFE</p>	<p>1.6</p>	<p>110</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring
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					<ul style="list-style-type: none"> - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T22] Wagon - Avensis 1.8i 16V Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values 	

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Engine control
TCCS II V3

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil

2000/07 - 2003/01	1ZZFE	1.8	129	<ul style="list-style-type: none"> - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve

Gear box control
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)

- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed

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Gear box control
Transmission control ECT 2.2

- Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode
 - Oxygen sensor (bank 2, sensor 1) Lambda actual value
 - Lambda sensor (B1,S1) Lambda actual value
 - LS (b1, s1) switch time rich to lean
 - LS (b2, s1) switch time rich to lean
 - LS (b1, s1) switch time lean to rich
 - LS (b2, s1) switch time lean to rich
 - Tank ventilation system: vapour pressure in the system
 - Throttle valve closing duty cycle
 - LS (b1,s2) switch time rich to lean
 - LS (b2,s2) switch time rich to lean
 - Oxygen sensor monitoring
 - Lean sensor current(bank 1,sensor 1)
 - Lean sensor current(bank 1,sensor 2)
 - Lean sensor mixture correction (B1,S1)
 - Lean sensor mixture correction (B1,S2)
 - Lambda control/Lambda sensor (B1,S2)
 - Lambda control/Lambda sensor (B1,S3)
 - Lambda control/Lambda sensor (B1,S4)
 - Lambda control, oxygen sensor (bank 2, sensor 2)
 - Lambda control/Lambda sensor (B2,S3)
 - Lambda control/Lambda sensor (B2,S4)
 - Air conditioner monitoring status
 - Oxygen sensor status (B1, S2)
 - Oxygen sensor status (bank 2, sensor 2)
 - Fuel shutoff status
 - Electrical power steering, signal
 - Air bypass solenoid valve
 - Oxygen sensor voltage (bank 1-sensor 3)
 - Oxygen sensor voltage (bank 1, sensor 4)
 - Oxygen sensor voltage (bank 2, sensor 3)
 - Oxygen sensor voltage (bank 2, sensor 4)
 - Evap. emissions control regulating valve status
 - Sports mode
 - Fault codes count
 - Throttle valve position 2
 - Solenoid switch valve DSU
 - Solenoid switch valve SLC
 - Solenoid shift valve SLD
 - Switch solenoid valve SLN
 - Solenoid shift valve SLS
 - Switch solenoid valve SLU
 - Catalytic converter control
 - Evapor. emission control monitoring
 - Secondary air system monitoring
 - Air conditioner monitoring
 - Lambda sensor heating circuit monitoring
 - Monitoring of sub-systems
 - Monitoring of fuel system
 - Misfire detection monitoring
 - EGR system monitoring
 - Evapor. emission control monitoring
 - Heated catalyt. converter monitoring
 - DK control motor actuation current 1
 - Gear down
 - System power mode status
 - Engine speed on misfiring
 - Engine load on misfiring
 - Throttle valve actuator power supply
 - Engine run time
- **Actuators**

					<ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T22] Wagon - Avensis 2.0i 16V Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 	

Engine control
TCCS II V3

- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)

- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control

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- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status

Gear box control
Transmission control ECT 2.2

- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring

				<ul style="list-style-type: none"> - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

1997/10 - 2003/01	3SFE	2.0	128	Gear box control Transmission control ECT 2.2	<p>system</p> <ul style="list-style-type: none"> - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact
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					<ul style="list-style-type: none"> - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Avensis [T22] Wagon - Avensis 2.0 Diesel Turbo Wagon
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value

<p>1997/10 - 2000/07</p>	<p>2CTE</p>	<p>2.0</p>	<p>90</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4)
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- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2

					<ul style="list-style-type: none"> - Air control valve control motor - Ingestion control valve
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump

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Gear box control
Transmission control ECT 2.2

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply

					<ul style="list-style-type: none"> - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Avensis [T25] - Avensis 1.8i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2

Engine control
TCCS II V3

- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)

- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve

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- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve

Gear box control
Transmission control ECT 2.2

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring

					<ul style="list-style-type: none"> - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Avensis [T25] - Avensis 2.0i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value

Engine control
TCCS II V3

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system

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- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement

Gear box control
Transmission control ECT 2.2

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

					<ul style="list-style-type: none"> - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Avensis [T25] - Avensis 1.6i 16V
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4)

Engine control
TCCS II V3

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

2003/01 - 2008/11	3ZZFE	1.6	110	<ul style="list-style-type: none"> - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1

Gear box control
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Avensis [T25] - Avensis 2.0i 16V 4WD**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2)

<p>2003/09 - 2008/11</p>	<p>1AZFSE</p>	<p>2.0</p>	<p>155</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU
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- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system

2003/03 - 2006/04	1CDFTV	2.0	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
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					<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T25] - Avensis 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda 	

2003/09
-
2008/11

2AZFSE

2.4

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Gear box control
Transmission control ECT 2.2

factor) 1
- regulation factor fuel mixture content (lambda
factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda
actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the
system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve

					<ul style="list-style-type: none"> - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T25] Liftback - Avensis 1.6i 16V Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) 	

Engine control
TCCS II V3

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<p>2003/01 - 2008/11</p>	<p>3ZZFE</p>	<p>1.6</p>	<p>110</p>		<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset

- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value

Gear box control
Transmission control ECT 2.2

- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor

					<ul style="list-style-type: none"> - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T25] Liftback - Avensis 1.8i 16V Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle 	

Engine control
TCCS II V3

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation

2003/01 - 2008/11	1ZZFE	1.8	129	<ul style="list-style-type: none"> - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4)

Gear box control
Transmission control ECT 2.2

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

					<ul style="list-style-type: none"> - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Avensis [T25] Liftback - Avensis 2.0i 16V Liftback	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor

- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean

Engine control
TCCS II V3

- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve

2003/01 - 2008/11	1AZFSE	2.0	155	<ul style="list-style-type: none"> - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear

Gear box control
Transmission control ECT 2.2

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

					<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T25] Liftback - Avensis 2.0 Diesel Turbo Liftback	
Year	Engine	Liters	HP	System	Functions	

• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

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2006/04

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Gear box control
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

					<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T25] Liftback - Avensis 2.4i Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda 	

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Gear box control
Transmission control ECT 2.2

factor) 2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)

- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump

					<ul style="list-style-type: none"> - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Avensis [T25] Wagon - Avensis 1.6i 16V Wagon**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode

Engine control
TCCS II V3

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

2003/01 - 2008/11	3ZZFE	1.6	110	<ul style="list-style-type: none"> - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Gear box control
Transmission control ECT 2.2

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil

					<ul style="list-style-type: none"> - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					
Avensis [T25] Wagon - Avensis 1.8i 16V Wagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter

Engine control
TCCS II V3

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1

2003/01 - 2008/11	1ZZFE	1.8	129	<ul style="list-style-type: none"> - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off

Gear box control
Transmission control ECT 2.2

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

					<ul style="list-style-type: none"> - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T25] Wagon - Avensis 2.0i 16V Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control 	

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Engine control
TCCS II V3

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve

2003/01 - 2008/11	1AZFSE	2.0	155	<ul style="list-style-type: none"> - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1)

Gear box control
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Avensis [T25] Wagon - Avensis 2.0i 16V 4WD Wagon	
Year	Engine	Liters	HP	System	Functions
					• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported

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Engine control
TCCS II V3

- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator

					<ul style="list-style-type: none"> - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Avensis [T25] Wagon - Avensis 2.0 Diesel Turbo Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 	

2003/03
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2006/04

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Gear box control
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

					<ul style="list-style-type: none"> - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Avensis [T25] Wagon - Avensis 2.4i Wagon**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve

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Gear box control
Transmission control ECT 2.2

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

					<ul style="list-style-type: none"> - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Avensis [T27] - Avensis 2.0	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda

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Engine control
TCCS II V3

actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve

					<ul style="list-style-type: none"> - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					
Aygo - Aygo 1.0					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2

2005/02 -	1KRFE	1.0	68	Engine control TCCS II V3	<ul style="list-style-type: none"> - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

					<ul style="list-style-type: none"> - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Camry - Camry 2.0i
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position

2006/06 -	1AZFE	2.0	147	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring
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					<ul style="list-style-type: none"> - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry - Camry 2.2 CNG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values 	

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Engine control
TCCS II V3

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil

1999/09 - 2001/08	5SFNE	2.2	120	<ul style="list-style-type: none"> - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve

Gear box control
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)

- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

TOYOTA

Camry - Camry 2.2

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off

Engine control
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

1991/09
-
2001/08

5SFE

2.2

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- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve
 - EGR stepper motor
 - Variable valve timing Bank 2
 - Air control valve control motor
 - Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda)

- factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)

Gear box control
Transmission control ECT 2.2

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve

				<ul style="list-style-type: none"> - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation

Engine control
TCCS II V3

- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring

1995/09 - 1998/08	5SFE	2.2	132 - 133	<ul style="list-style-type: none"> - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
				<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

Gear box control
Transmission control ECT 2.2

system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact

					<ul style="list-style-type: none"> - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry - Camry 2.0 i Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value 	

<p>1992/11 - 2001/07</p>	<p>3SFE</p>	<p>2.0</p>	<p>125</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4)
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- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2

					<ul style="list-style-type: none"> - Air control valve control motor - Ingestion control valve
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump

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Gear box control
Transmission control ECT 2.2

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply

					<ul style="list-style-type: none"> - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry - Camry 2.2 i Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 	

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [ACV36] - Camry 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear 	

Engine control
TCCS II V3

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

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- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda

Gear box control
Transmission control ECT 2.2

actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve

					<ul style="list-style-type: none"> - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [ACV40] - Camry 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 	

Engine control
TCCS II V3

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

2006/06	2AZFE	2.4	167	<ul style="list-style-type: none"> - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4)

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

					<ul style="list-style-type: none"> - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [MCV20] - Camry Vienta 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system 	

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

1997/07 - 2002/08	1MZFE	3.0	192	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve
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					<ul style="list-style-type: none"> - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [MCV36] - Camry 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control 	

Engine control
TCCS II V3

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

2002/09 - 2006/06	1MZFE	3.0	192	<ul style="list-style-type: none"> - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system
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Gear box control
Transmission control ECT 2.2

- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

					<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [SXV20] - Camry 2.2i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 	

1998/05 - 2002/02	5SFE	2.2	128	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2)
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- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA						Camry [V1] - Camry 3.0 i Sedan					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) 					

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Gear box control
Transmission control ECT 2.2

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD

					<ul style="list-style-type: none"> - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Camry [V2] - Camry 2.2i 16V	
Year	Engine	Liters	HP	System	Functions
					• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported

Engine control
TCCS II V3

- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator

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- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle

Gear box control
Transmission control ECT 2.2

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation

					<ul style="list-style-type: none"> - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [V2] - Camry 3.0i 24V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position 	

Engine control
TCCS II V3

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

1996/08 - 2001/07	1MZFE	3.0	190	<ul style="list-style-type: none"> - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Gear box control
Transmission control ECT 2.2

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve

				<ul style="list-style-type: none"> - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2)

Engine control
TCCS II V3

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

<p>1996/06 - 2001/09</p>	<p>1MZFE</p>	<p>3.0</p>	<p>192</p>	<ul style="list-style-type: none"> - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time <p>• Actuators</p> <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve <p>• Functional tests</p> <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test
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- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

Gear box control
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay

					<ul style="list-style-type: none"> - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [V2] - Camry 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve 	

Engine control
TCCS II V3

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

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				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3)

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

					<ul style="list-style-type: none"> - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Camry [V2] - Camry 2.2i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

Engine control
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system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact

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- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position

Gear box control
Transmission control ECT 2.2

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

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Gear box control
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [V2] Wagon - Camry Wagon 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 	

Engine control
TCCS II V3

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

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- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve

Gear box control
Transmission control ECT 2.2

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

					<ul style="list-style-type: none"> - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [V2] Wagon - Camry Wagon 2.2i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test 	

- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

1998/05 - 2002/08	5SFE	2.2	129	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay
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					<ul style="list-style-type: none"> - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [V3] - Camry 3.0i 24V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 	

Engine control
TCCS II V3

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

1999/08 - 2006/01	1MZFE	3.0	186	<ul style="list-style-type: none"> - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4)

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

				<ul style="list-style-type: none"> - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Engine control
TCCS II V3

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve

1998/09 - 2006/08	1MZFE	3.0	186	<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve

Gear box control
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

					<ul style="list-style-type: none"> - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Camry [V3] - Camry 2.4i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported

Engine control
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2

2001/08 - 2006/01	2AZFE	2.4	152	<ul style="list-style-type: none"> - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter

Gear box control
Transmission control ECT 2.2

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1

					<ul style="list-style-type: none"> - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Camry [V3] - Camry 2.0i 16V
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure

2001/08
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2006/01

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Engine control
TCCS II V3

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

					<ul style="list-style-type: none"> - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [V3] - Camry 2.4 i Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 	

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

2003/03 - 2005/12	2AZFE	2.4	152	Engine control TCCS II V3	<ul style="list-style-type: none"> - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air
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					<ul style="list-style-type: none"> - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [V3] - Camry 3.0 i Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement 	

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Engine control
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

					<ul style="list-style-type: none"> - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Camry [V3] - Camry 2.4
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4)

Engine control
TCCS II V3

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

2002/08 - 2009/08	2AZFE	2.4	167	<ul style="list-style-type: none"> - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1

Gear box control
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

				<ul style="list-style-type: none"> - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve

Engine control
TCCS II V3

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

					<ul style="list-style-type: none"> - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
2002/08	2AZFE	2.4	0		<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Gear box control
Transmission control ECT 2.2

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM

					<ul style="list-style-type: none"> - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [V3] - Camry 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup 	

Engine control
TCCS II V3

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation

2001/08 - 2006/01	2AZFE	2.4	154	<ul style="list-style-type: none"> - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1

Gear box control
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [V3] - Camry 2.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch 	

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Engine control
TCCS II V3

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve

2002/05 - 2004/11	1AZFE	2.0	146	<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve

Gear box control
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

					<ul style="list-style-type: none"> - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Camry [V3] - Camry 3.0i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported

Engine control
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2

2002/05 -	1MZFE	3.0	186	<ul style="list-style-type: none"> - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter

Gear box control
Transmission control ECT 2.2

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1

				<ul style="list-style-type: none"> - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off

Engine control
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

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- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve
 - EGR stepper motor
 - Variable valve timing Bank 2
 - Air control valve control motor
 - Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda)

- factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)

Gear box control
Transmission control ECT 2.2

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve

					<ul style="list-style-type: none"> - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [V3] - Camry 3.3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) 	

Engine control
TCCS II V3

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<p>2003/09 - 2006/08</p>	<p>3MZFE</p>	<p>3.3</p>	<p>213</p>		<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset

- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value

Gear box control
Transmission control ECT 2.2

- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor

					<ul style="list-style-type: none"> - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					
Camry [V3] Wagon - Camry Wagon 2.4i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle

Engine control
TCCS II V3

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation

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				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4)

Gear box control
Transmission control ECT 2.2

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

					<ul style="list-style-type: none"> - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [V40] - Camry 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle 	

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Engine control
TCCS II V3

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve

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- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)

Gear box control
Transmission control ECT 2.2

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system

Engine control
TCCS II V3

- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

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• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve

Gear box control
Transmission control ECT 2.2

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Camry [V4] - Camry 2.4 VVT-i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation

<p>2006/01 - 2011/08</p>	<p>2AZFE</p>	<p>2.4</p>	<p>167</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring
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					<ul style="list-style-type: none"> - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Camry [XV30] - Camry 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset 	

- Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode
 - Oxygen sensor (bank 2, sensor 1) Lambda actual value
 - Lambda sensor (B1,S1) Lambda actual value

Engine control
TCCS II V3

- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor

2001/09 - 2006/01	2AZFE	2.4	159	<ul style="list-style-type: none"> - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value

Gear box control
Transmission control ECT 2.2

- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)

- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2

					<ul style="list-style-type: none"> - Air control valve control motor - Ingestion control valve
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TOYOTA **Celica Convertible - Celica 2.2i 16V Convertible**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4)

1990/09 - 1999/08	5SFE	2.2	136	Engine control TCCS II V3	<ul style="list-style-type: none"> - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring
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					<ul style="list-style-type: none"> - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Celica Coupe - Celica Coupe 1.8i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor 	

- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean

Engine control
TCCS II V3

- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve

1999/09 - 2006/04	1ZZFE	1.8	146	<ul style="list-style-type: none"> - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear

Gear box control
Transmission control ECT 2.2

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

				<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda

Engine control
TCCS II V3

actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve

1999/08 - 2006/04	2ZZGE	1.8	190		<ul style="list-style-type: none"> - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement

Gear box control
Transmission control ECT 2.2

- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve

- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve

					<ul style="list-style-type: none"> - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Celica Liftback - Celica Liftback 1.8i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3)

Engine control
TCCS II V3

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

1999/09 - 2005/08	1ZZFE	1.8	0	<ul style="list-style-type: none"> - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system

Gear box control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

Transmission control ECT 2.2

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve

					<ul style="list-style-type: none"> - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Celica Liftback - Celica 1.8i 16V Liftback

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve

Engine control
TCCS II V3

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

1999/09 - 2005/08	2ZZGE	1.8	0	<ul style="list-style-type: none"> - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported

Gear box control
Transmission control ECT 2.2

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2

					<ul style="list-style-type: none"> - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Celica Liftback - Celica 2.2i 16V Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve 	

<p>1995/09 - 1999/08</p>	<p>5SFE</p>	<p>2.2</p>	<p>0</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3)
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- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Celica [T23] Coupe - Celica 1.8i 16V Coupe**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation

Engine control
TCCS II V3

- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring

1999/08 - 2005/09	1ZZFE	1.8	143	<ul style="list-style-type: none"> - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
				<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

Gear box control
Transmission control ECT 2.2

system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact

				<ul style="list-style-type: none"> - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position

Engine control
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

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- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

Gear box control
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla - Corolla 1.8i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2

Engine control
TCCS II V3

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

2003/01 - 2008/08	1ZZFE	1.8	125	<ul style="list-style-type: none"> - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request

Gear box control
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

				<ul style="list-style-type: none"> - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor

- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean

Engine control
TCCS II V3

- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve

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- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear

Gear box control
Transmission control ECT 2.2

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

					<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla - Corolla 1.8 i	
Year	Engine	Liters	HP	System	Functions

- **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

- **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

- **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1

- regulation factor fuel mixture content (lambda factor) 2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

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Engine control
TCCS II V3

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode

					<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla - Corolla 1.5i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda

2000/08 - 2004/12	1NZFE	1.5	109	Gear box control Transmission control ECT 2.2	<p>factor) 2</p> <ul style="list-style-type: none"> - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4)
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- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump

					<ul style="list-style-type: none"> - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Corolla Altis - New Corolla Altis 1.6i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode

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Engine control
TCCS II V3

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla Limo[E12] - Corolla Limo 1.6i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test

- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay

					<ul style="list-style-type: none"> - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E10] Van - Corolla Van 2.2 Diesel 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 	

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Gear box control
Transmission control ECT 2.2

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

					<ul style="list-style-type: none"> - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Corolla [E10] Van - Corolla Van 2.2 Diesel**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status

<p>1998/04 - 2002/06</p>	<p>3CE</p>	<p>2.2</p>	<p>79</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring
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					<ul style="list-style-type: none"> - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E10] Wagon - Corolla Wagon 2.2 Diesel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) 	

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

1998/04 - 2000/08	3CE	2.2	79	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve
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				<ul style="list-style-type: none"> - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control

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Gear box control
Transmission control ECT 2.2

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

					- Ingestion control valve
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TOYOTA						Corolla [E11, JT] Liftback - Corolla 1.6i 16V Liftback					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) 						

Engine control
TCCS II V3

- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1

<p>1999/10 - 2001/09</p>	<p>3ZZFE</p>	<p>1.6</p>	<p>110</p>	<ul style="list-style-type: none"> - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2

Gear box control
Transmission control ECT 2.2

- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)

- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E11, JT] Liftback - Corolla 1.9 Diesel Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) 	

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Gear box control
Transmission control ECT 2.2

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD

					<ul style="list-style-type: none"> - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla [E11, JT] Liftback - Corolla 1.4i 16V Liftback	
Year	Engine	Liters	HP	System	Functions
					• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator

					<ul style="list-style-type: none"> - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E11, JT] Liftback - Corolla 2.0 Diesel Turbo Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 	

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Gear box control
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

					<ul style="list-style-type: none"> - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Corolla [E11, SB] Liftback - Corolla 1.6i 16V Liftback
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve

Engine control
TCCS II V3

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

1999/11 - 2001/11	3ZZFE	1.6	110	<ul style="list-style-type: none"> - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 				

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Gear box control
Transmission control ECT 2.2

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM

					<ul style="list-style-type: none"> - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E11, SB] Liftback - Corolla 1.9 Diesel Liftback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup 	

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Gear box control
Transmission control ECT 2.2

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation

					<ul style="list-style-type: none"> - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Corolla [E11, SB] Liftback - Corolla 1.4i 16V Liftback

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4)

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

					<ul style="list-style-type: none"> - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E11] - Corolla 1.6i 16V Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system 	

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

Engine control
TCCS II V3

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve

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- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve

Gear box control
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported

Engine control
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2

1999/10	3ZZFE	1.6	110	<ul style="list-style-type: none"> - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter

Gear box control
Transmission control ECT 2.2

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1

					<ul style="list-style-type: none"> - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Corolla [E11] - Corolla 1.8i 16V
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3)

Engine control
TCCS II V3

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

1997/09 - 2002/08	1ZZFE	1.8	125	<ul style="list-style-type: none"> - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Gear box control
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve

					<ul style="list-style-type: none"> - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E11] - Corolla 1.8i 16V Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 	

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Engine control
TCCS II V3

- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode

- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve
 - EGR stepper motor
 - Variable valve timing Bank 2
 - Air control valve control motor
 - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

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Gear box control
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E11] - Corolla 1.4i 16V Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 	

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Corolla [E11] - Corolla 1.6 i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear

<p>1999/09 - 2002/07</p>	<p>4AFE</p>	<p>1.6</p>	<p>107</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC
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				<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda

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Gear box control
Transmission control ECT 2.2

actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve

				<ul style="list-style-type: none"> - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement

<p>1999/09 - 2002/09</p>	<p>4AFE</p>	<p>1.6</p>	<p>107</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve
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- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve

					<ul style="list-style-type: none"> - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Corolla [E11] - Corolla 1.8 i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4)

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

				<ul style="list-style-type: none"> - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

1996/10 - 2002/08	7AFE	1.8	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve
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					<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Corolla [E11] - Corolla 2.0 Diesel Turbo**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve

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Gear box control
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve
 - EGR stepper motor
 - Variable valve timing Bank 2
 - Air control valve control motor
 - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system

<p>1996/03 - 2000/11</p>	<p>4AFE</p>	<p>1.6</p>	<p>107 - 110</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
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					<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla [E11] - Corolla 2.2 Diesel	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda

<p>1998/04 - 2000/08</p>	<p>3CE</p>	<p>2.2</p>	<p>79</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2)
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- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve

					<ul style="list-style-type: none"> - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E11] - Corolla 2.2 Diesel 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) 	

1998/04
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2.2

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Gear box control
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla [E11] Hatchback - Corolla 1.6i 16V Hatchback	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

Engine control
TCCS II V3

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

1999/10 - 2001/07	3ZZFE	1.6	110	<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil

Gear box control
Transmission control ECT 2.2

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1

					<ul style="list-style-type: none"> - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Corolla [E11] Hatchback - Corolla 1.9 Diesel Hatchback
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request

<p>2000/01 - 2001/07</p>	<p>1WZ</p>	<p>1.9</p>	<p>69</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems
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					<ul style="list-style-type: none"> - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E11] Hatchback - Corolla 1.4i 16V Hatchback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 	

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

1999/10 - 2001/07	4ZZFE	1.4	97	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM
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					<ul style="list-style-type: none"> - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					
Corolla [E11] Hatchback - Corolla 2.0 Diesel Turbo Hatchback					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement

2000/08 - 2001/07	1CDFTV	2.0	90	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve
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- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve

					<ul style="list-style-type: none"> - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Corolla [E11] Wagon - Corolla 1.6i 16V Wagon**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3)

Engine control
TCCS II V3

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

1999/10 - 2001/09	3ZZFE	1.6	110	<ul style="list-style-type: none"> - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

Gear box control

Transmission control ECT 2.2

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve

					<ul style="list-style-type: none"> - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E11] Wagon - Corolla 1.8i 16V Wagon 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve 	

1997/04
-
2001/07

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Gear box control
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve
 - EGR stepper motor
 - Variable valve timing Bank 2
 - Air control valve control motor
 - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system

<p>1999/10 - 2001/09</p>	<p>4ZZFE</p>	<p>1.4</p>	<p>97</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
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					<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E11] Wagon - Corolla 1.9 Diesel Wagon 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda 	

2000/01
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2001/07

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Gear box control
Transmission control ECT 2.2

factor) 1
- regulation factor fuel mixture content (lambda
factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda
actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the
system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve

					<ul style="list-style-type: none"> - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E11] Wagon - Corolla 2.0 Diesel Turbo Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) 	

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Gear box control
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla [E11] Wagon - Corolla 1.9 D Wagon	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12, JTD] - Corolla 1.6i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump 	

Engine control
TCCS II V3

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

2001/10 - 2006/11	3ZZFE	1.6	110	<ul style="list-style-type: none"> - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

					<ul style="list-style-type: none"> - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla [E12, JTD] - Corolla 1.4i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

2001/10 - 2006/11	4ZZFE	1.4	97	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM
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					<ul style="list-style-type: none"> - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12, JTD] - Corolla 1.4 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement 	

2004/01 - 2006/11	1NDTV	1.4	90	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve
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- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve

					<ul style="list-style-type: none"> - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Corolla [E12, JTD] Wagon - Corolla 1.6i 16V Wagon**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3)

Engine control
TCCS II V3

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

2001/10 - 2006/11	3ZZFE	1.6	110	<ul style="list-style-type: none"> - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system

Gear box control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

Transmission control ECT 2.2

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve

					<ul style="list-style-type: none"> - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Corolla [E12, JTD] Wagon - Corolla 1.4i 16V Wagon

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve

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Gear box control
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve
 - EGR stepper motor
 - Variable valve timing Bank 2
 - Air control valve control motor
 - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system

2001/10 - 2004/05	1CDFTV	2.0	90 - 116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
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					<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla [E12, NMT] - Corolla 1.6i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda

2002/01 - 2007/02	3ZZFE	1.6	110	Engine control TCCS II V3	<ul style="list-style-type: none"> factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2)
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- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve

					<ul style="list-style-type: none"> - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Corolla [E12, NMT] - Corolla 2.0 Diesel Turbo**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1)

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Gear box control
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla [E12, NMT] Wagon - Corolla 1.6i Wagon	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

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Engine control
TCCS II V3

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Corolla [E12, NMT] Wagon - Corolla 1.4 Diesel Turbo Wagon					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump

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Gear box control
Transmission control ECT 2.2

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

					<ul style="list-style-type: none"> - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Corolla [E12] - Corolla 1.4 i**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve

Engine control
TCCS II V3

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring

				<ul style="list-style-type: none"> - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<p>2002/09 - 2007/07</p>	<p>4ZZFE</p>	<p>1.4</p>	<p>97</p>	<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

Gear box control
Transmission control ECT 2.2

- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air

					<ul style="list-style-type: none"> - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] - Corolla 1.8 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement 	

Engine control
TCCS II V3

- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve

- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve

2002/09 - 2007/07	1ZZFE	1.8	135	<ul style="list-style-type: none"> - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve

Gear box control
Transmission control ECT 2.2

- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring

					<ul style="list-style-type: none"> - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] - Corolla 1.8i 16V Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system 	

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

Engine control

TCCS II V3

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve

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- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode

Gear box control
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] - Corolla 1.6i 16V Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection 	

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported

Engine control
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2

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- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter

Gear box control
Transmission control ECT 2.2

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1

					<ul style="list-style-type: none"> - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Corolla [E12] - Corolla 1.8
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3)

Engine control
TCCS II V3

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

2000/08 - 2008/08	1ZZFE	1.8	125 - 147	<ul style="list-style-type: none"> - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Gear box control
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve

					<ul style="list-style-type: none"> - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] - Corolla 1.5i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position 	

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Engine control
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve
 - EGR stepper motor
 - Variable valve timing Bank 2
 - Air control valve control motor
 - Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

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Engine control
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] - Corolla 2.0 Diesel Turbo Sedan	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 	

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] - Corolla 2.2 Diesel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear 	

<p>2000/08 - 2004/06</p>	<p>3CE</p>	<p>2.2</p>	<p>79</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC
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					<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla [E12] Altis - Corolla Altis 1.6i	
Year	Engine	Liters	HP	System	Functions

• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

Engine control
TCCS II V3

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode

2001/05 - 2006/10	3ZZFE	1.6	112	<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2

Gear box control
Transmission control ECT 2.2

- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status

- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

				<ul style="list-style-type: none"> - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3)

<p>1999/03 - 2008/01</p>	<p>3ZZFE</p>	<p>1.6</p>	<p>112</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring
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					<ul style="list-style-type: none"> - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] Altis - Corolla Altis 1.8i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system 	

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

1999/03 - 2008/01	1ZZFE	1.8	137	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve
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					<ul style="list-style-type: none"> - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] Hatchback - Corolla 1.8i 16V Hatchback	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control 	

<p>2001/11 - 2007/12</p>	<p>2ZZGE</p>	<p>1.8</p>	<p>190 - 224</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3)
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- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

- Ingestion control valve

TOYOTA

Corolla [E12] Hatchback - Corolla 1.4i 16V Hatchback

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none">• Functional tests<ul style="list-style-type: none">- Diagnosis/electronics test- Gear selection- Evaporative emission control system leak test- Injected quantity• Adjustments / settings<ul style="list-style-type: none">- Adaptive parameters reset- Write vehicle identification number (VIN)• Current values<ul style="list-style-type: none">- Short-term AFR correction B2- Long-term AFR correction B2- Solenoid valve, swirl control- Sol. valve, variable intake system- Contact idle- Regulator idle mode: pulse-duty factor- kick-down switch- circuit compressor control- Winter switch- EGR valve - system- Oxygen sensor 1- Oxygen sensor 2- regulation factor fuel mixture content (lambda factor) 1- regulation factor fuel mixture content (lambda factor) 2- electric fuel pump- exhausted gases pressure regul. valve- fuel system - bank 1- fuel system - bank 2- Adjust. revolutions idle- Oil- Canister valve active carbon filter- Direct transmission Converter lockup- Tiptronic switch: lower gear engagement- Tiptronic switch: upper gear engagement- Air mass, actual value- exhausted gases recirculation control- secondary air switch. valve- Solenoid valve: switch. intake manifold 1- Solenoid valve: switch. intake manifold 1- EGR-magnetic valve step position- Ventilation solenoid valve- Lambda-control (bank 2, sensor 2)- Current gear- Lambda controller Lambda probe (B1,S1)- Lambda controller Lambda probe (B2,S1)- Charging-air pressure magnetic valve- Secondary system in limp-home mode- Exhaust pipe bypass solenoid valve- Overdrive deactivation solen. valve- Switch for overdrive deactivation- Secondary air system status- Idle actuator, position- Engine stop request- intake manifold pressure- Oxygen sensor value (bank 1, sensor 3)- Oxygen sensor value (bank 1, sensor 4)- Oxygen sensor value (bank 2, sensor 3)- Oxygen sensor value (bank 2, sensor 4)- Lambda regulation (bank 1, sensor 2)- Air compressor switch off

Engine control
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

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2007/12

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- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve
 - EGR stepper motor
 - Variable valve timing Bank 2
 - Air control valve control motor
 - Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda)

Gear box control
Transmission control ECT 2.2

- factor) 1
 - regulation factor fuel mixture content (lambda
- factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode
 - Oxygen sensor (bank 2, sensor 1) Lambda actual value
 - Lambda sensor (B1,S1) Lambda actual value
 - LS (b1, s1) switch time rich to lean
 - LS (b2, s1) switch time rich to lean
 - LS (b1, s1) switch time lean to rich
 - LS (b2, s1) switch time lean to rich
 - Tank ventilation system: vapour pressure in the system
 - Throttle valve closing duty cycle
 - LS (b1,s2) switch time rich to lean
 - LS (b2,s2) switch time rich to lean
 - Oxygen sensor monitoring
 - Lean sensor current(bank 1,sensor 1)
 - Lean sensor current(bank 1,sensor 2)
 - Lean sensor mixture correction (B1,S1)
 - Lean sensor mixture correction (B1,S2)
 - Lambda control/Lambda sensor (B1,S2)

- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve

					<ul style="list-style-type: none"> - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					
Corolla [E12] Hatchback - Corolla 1.6i 16V Hatchback					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1)

Engine control
TCCS II V3

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD

2001/11 - 2007/02	3ZZFE	1.6	110	<ul style="list-style-type: none"> - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
				<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value

Gear box control
Transmission control ECT 2.2

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system

					<ul style="list-style-type: none"> - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Corolla [E12] Hatchback - Corolla 2.0 Diesel Turbo Hatchback					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle

2001/11
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2004/05

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2.0

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Gear box control
Transmission control ECT 2.2

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation

					<ul style="list-style-type: none"> - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Corolla [E12] Hatchback - Corolla 1.4 Diesel Turbo Hatchback
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request

2002/09
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2007/12

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Gear box control
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

					<ul style="list-style-type: none"> - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] Runx - Corolla RunX 1.4 i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 	

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Engine control
TCCS II V3

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM

					<ul style="list-style-type: none"> - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<p>2002/09 - 2007/07</p>	<p>4ZZFE</p>	<p>1.4</p>	<p>97</p>		<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1

Gear box control
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status

- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1

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Engine control
TCCS II V3

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla [E12] Runx - Corolla RunX 1.6 i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

- 2007/07	3ZZFE	1.6	110	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve
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					<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Corolla [E12] Verso - Corolla Verso 1.8i 16V**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve

Engine control
TCCS II V3

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

<p>2001/09 - 2004/01</p>	<p>1ZZFE</p>	<p>1.8</p>	<p>135</p>	<ul style="list-style-type: none"> - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection
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- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported

Gear box control
Transmission control ECT 2.2

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2

					<ul style="list-style-type: none"> - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] Verso - Corolla Verso 1.6i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump 	

Engine control
TCCS II V3

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

2001/09 - 2004/01	3ZZFE	1.6	110	<ul style="list-style-type: none"> - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

					<ul style="list-style-type: none"> - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] Verso - Corolla Verso 2.0 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 	

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

2001/09 - 2004/01	1CDFTV	2.0	90	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air
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					<ul style="list-style-type: none"> - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E12] Wagon - Corolla 1.8i 16V Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement 	

Engine control
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

2000/08 - 2006/12	1ZZFE	1.8	135	<ul style="list-style-type: none"> - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

Gear box control
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [E9] Wagon - Corolla 1.4 16V Wagon	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system 	

Engine control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

TCCS II V3

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve

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- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode

Gear box control
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Corolla [R11] Verso - Corolla Verso 1.8i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test

- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor / fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

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Engine control
TCCS II V3

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay

					<ul style="list-style-type: none"> - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					
Corolla [R11] Verso - Corolla Verso 1.6i 16V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1

2010/02	1ZR-FAE	1.6	132	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4)
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- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

					<ul style="list-style-type: none"> - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Corolla [R1] Verso - Corolla Verso 1.6i 16V
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status

<p>2004/02 - 2009/02</p>	<p>3ZZFE</p>	<p>1.6</p>	<p>110</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring
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					<ul style="list-style-type: none"> - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Corolla [R1] Verso - Corolla Verso 1.8i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) 	

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

Engine control
TCCS II V3

- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve

2004/02 - 2009/02	1ZZFE	1.8	129	<ul style="list-style-type: none"> - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control

Gear box control
Transmission control ECT 2.2

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

					- Ingestion control valve
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TOYOTA						Crown - Crown 2.5i					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) 						

2005/11	5GRFE	2.5	197	Engine control TCCS II V3	<ul style="list-style-type: none"> - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1
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					<ul style="list-style-type: none"> - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Crown - Crown 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch 	

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean

2005/02 -	3GRFE	3.0	231	Engine control TCCS II V3	<ul style="list-style-type: none"> - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve
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				<ul style="list-style-type: none"> - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Duet - Duet 1.0i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1

1998/09
-
2000/05

EJDE

1.0

60

Engine control
TCCS II V3

- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode

- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported

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Engine control
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- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator

					<ul style="list-style-type: none"> - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Duet - Duet 1.0i 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 1 	

1998/09 - 2000/05	EJDE	1.0	60	Engine control TCCS II V3	<p>factor) 2</p> <ul style="list-style-type: none"> - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4)
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- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump

				<ul style="list-style-type: none"> - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position

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Engine control
TCCS II V3

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

					<ul style="list-style-type: none"> - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Echo - Echo 1.5i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values 	

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Engine control
TCCS II V3

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil

1999/09	1NZFE	1.5	109	<ul style="list-style-type: none"> - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
-				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve

Gear box control
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)

- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed
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Engine control
TCCS II V3

- Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode
 - Oxygen sensor (bank 2, sensor 1) Lambda actual value
 - Lambda sensor (B1,S1) Lambda actual value
 - LS (b1, s1) switch time rich to lean
 - LS (b2, s1) switch time rich to lean
 - LS (b1, s1) switch time lean to rich
 - LS (b2, s1) switch time lean to rich
 - Tank ventilation system: vapour pressure in the system
 - Throttle valve closing duty cycle
 - LS (b1,s2) switch time rich to lean
 - LS (b2,s2) switch time rich to lean
 - Oxygen sensor monitoring
 - Lean sensor current(bank 1,sensor 1)
 - Lean sensor current(bank 1,sensor 2)
 - Lean sensor mixture correction (B1,S1)
 - Lean sensor mixture correction (B1,S2)
 - Lambda control/Lambda sensor (B1,S3)
 - Lambda control/Lambda sensor (B1,S4)
 - Lambda control, oxygen sensor (bank 2, sensor 2)
 - Lambda control/Lambda sensor (B2,S3)
 - Lambda control/Lambda sensor (B2,S4)
 - Air conditioner monitoring status
 - Oxygen sensor status (B1, S2)
 - Oxygen sensor status (bank 2, sensor 2)
 - Fuel shutoff status
 - Electrical power steering, signal
 - Air bypass solenoid valve
 - Oxygen sensor voltage (bank 1-sensor 3)
 - Oxygen sensor voltage (bank 1, sensor 4)
 - Oxygen sensor voltage (bank 2, sensor 3)
 - Oxygen sensor voltage (bank 2, sensor 4)
 - Evap. emissions control regulating valve status
 - Sports mode
 - Fault codes count
 - Throttle valve position 2
 - Solenoid switch valve DSU
 - Solenoid switch valve SLC
 - Solenoid shift valve SLD
 - Switch solenoid valve SLN
 - Solenoid shift valve SLS
 - Switch solenoid valve SLU
 - Catalytic converter control
 - Evapor. emission control monitoring
 - Secondary air system monitoring
 - Air conditioner monitoring
 - Lambda sensor heating circuit monitoring
 - Monitoring of sub-systems
 - Monitoring of fuel system
 - Misfire detection monitoring
 - EGR system monitoring
 - Evapor. emission control monitoring
 - Heated catalyt. converter monitoring
 - DK control motor actuation current 1
 - Gear down
 - System power mode status
 - Engine speed on misfiring
 - Engine load on misfiring
 - Throttle valve actuator power supply
 - Engine run time
- **Actuators**

2003/06	1NZFE	1.5	106	<ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1

Gear box control
Transmission control ECT 2.2

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

				<ul style="list-style-type: none"> - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3)

Engine control
TCCS II V3

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

2000/08 - 2002/12	1NZFE	1.5	109	<ul style="list-style-type: none"> - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Gear box control
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve

				<ul style="list-style-type: none"> - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve

Engine control
TCCS II V3

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

					<ul style="list-style-type: none"> - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
1999/09 - 2005/08	1NZFE	1.5	109		<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset

- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value

Gear box control
Transmission control ECT 2.2

- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor

					<ul style="list-style-type: none"> - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Harrier - Harrier 3.3i 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil 	

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Engine control
TCCS II V3

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1

					<ul style="list-style-type: none"> - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Hiace - Hiace 2.7
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure

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Engine control
TCCS II V3

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

					<ul style="list-style-type: none"> - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Hiace - Hiace 2.7 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 	

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

1998/04 - 2009/05	3RZFE	2.7	143	Engine control TCCS II V3	<ul style="list-style-type: none"> - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air
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					<ul style="list-style-type: none"> - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Highlander - Highlander 2.4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement 	

Engine control
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

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				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

Gear box control
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Highlander - Highlander 2.4 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system

Engine control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

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- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve

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- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode

Gear box control
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Highlander - Highlander 3.0	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test

- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

Engine control
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- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay

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				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup

Gear box control
Transmission control ECT 2.2

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation

					<ul style="list-style-type: none"> - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Highlander - Highlander 3.0 4x4
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3)

Engine control
TCCS II V3

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

2000/09 - 2003/08	1MZFE	3.0	223		<ul style="list-style-type: none"> - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Gear box control
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve

					<ul style="list-style-type: none"> - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Highlander - Highlander 3.3 4x4
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position

Engine control
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

2003/09 - 2007/08	3MZFE	3.3	218 - 233	<ul style="list-style-type: none"> - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test
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- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

Gear box control
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Highlander - Highlander 3.3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 	

Engine control
TCCS II V3

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

2003/09 - 2007/08	3MZFE	3.3	233	<ul style="list-style-type: none"> - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request

Gear box control
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

					<ul style="list-style-type: none"> - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Highlander - Highlander 3.5 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 	

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

2007/09 -	2GRFE	3.5	274	Engine control TCCS II V3	<ul style="list-style-type: none"> - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM
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					<ul style="list-style-type: none"> - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Highlander - Highlander 3.5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement 	

2007/09 -	2GRFE	3.5	274	Engine control TCCS II V3	<ul style="list-style-type: none"> - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve
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- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve

					<ul style="list-style-type: none"> - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Hilux - Hilux 3.0 TD 4x4
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3)

2002/03 - 2005/05	1KZTE	3.0	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring
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					<ul style="list-style-type: none"> - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Hilux - Hilux 3.0 Diesel Turbo 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

1999/12 -	1KZTE	3.0	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve
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					<ul style="list-style-type: none"> - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Hilux - Hilux 2.7i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve 	

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Gear box control
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)

- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1

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Gear box control
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Hilux - Hilux 2.4 Diesel Turbo 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch 	

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

-	2LTE	2.4	97	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve
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					<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Hilux - Hilux 2.0i 4WD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve

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Gear box control
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system

2000/01	2RZFE	2.4	140	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
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					<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Hilux Pickup - Hilux 2.4i Pickup 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda 	

<p>1988/09 - 1997/08</p>	<p>22RE</p>	<p>2.4</p>	<p>114</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2)
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- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve

					<ul style="list-style-type: none"> - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Hilux Pickup - Hilux 2.4i Pickup 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) 	

1989/08
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1997/08

22RE

2.4

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Gear box control
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

				<ul style="list-style-type: none"> - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset

- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value

1997/11 - 2001/08	2RZFE	2.4	108	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor
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					<ul style="list-style-type: none"> - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Hilux Pickup - Hilux 2.4i Pickup	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle 	

<p>1997/08 - 1999/08</p>	<p>2RZFE EFI</p>	<p>2.4</p>	<p>141</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2)
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- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation

					<ul style="list-style-type: none"> - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Hilux Pickup - Hilux 2.5 Diesel Turbo Pickup 4x4
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request

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Gear box control
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

					<ul style="list-style-type: none"> - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Hilux Surf - Hilux Surf 3.0 Diesel Turbo 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 	

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

1993/08 - 1995/11	1KZTE	3.0	131	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM
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				<ul style="list-style-type: none"> - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1

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Gear box control
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status

- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

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Gear box control
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

				<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2

<p>2000/06 - 2002/11</p>	<p>1KDFTV</p>	<p>3.0</p>	<p>170</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

				<ul style="list-style-type: none"> - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3)

2002/11 - 2005/08	1KDFTV	3.0	170	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring
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					<ul style="list-style-type: none"> - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Hilux Surf - Hilux Surf 2.4 Diesel Turbo 4WD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

1990/08 - 1993/08	2LTE	2.4	97	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve
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					<ul style="list-style-type: none"> - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Hilux Tiger - Hilux Tiger D4D 2.5 Diesel Turbo 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control 	

2001/11 -	2KDFTV	2.5	103	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3)
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- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

- Ingestion control valve

TOYOTA

Hilux Wagon - Hilux 3.0i Wagon

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none">• Functional tests<ul style="list-style-type: none">- Diagnosis/electronics test- Gear selection- Evaporative emission control system leak test- Injected quantity• Adjustments / settings<ul style="list-style-type: none">- Adaptive parameters reset- Write vehicle identification number (VIN)• Current values<ul style="list-style-type: none">- Short-term AFR correction B2- Long-term AFR correction B2- Solenoid valve, swirl control- Sol. valve, variable intake system- Contact idle- Regulator idle mode: pulse-duty factor- kick-down switch- circuit compressor control- Winter switch- EGR valve - system- Oxygen sensor 1- Oxygen sensor 2- regulation factor fuel mixture content (lambda factor) 1- regulation factor fuel mixture content (lambda factor) 2- electric fuel pump- exhausted gases pressure regul. valve- fuel system - bank 1- fuel system - bank 2- Adjust. revolutions idle- Oil- Canister valve active carbon filter- Direct transmission Converter lockup- Tiptronic switch: lower gear engagement- Tiptronic switch: upper gear engagement- Air mass, actual value- exhausted gases recirculation control- secondary air switch. valve- Solenoid valve: switch. intake manifold 1- Solenoid valve: switch. intake manifold 1- EGR-magnetic valve step position- Ventilation solenoid valve- Lambda-control (bank 2, sensor 2)- Current gear- Lambda controller Lambda probe (B1,S1)- Lambda controller Lambda probe (B2,S1)- Charging-air pressure magnetic valve- Secondary system in limp-home mode- Exhaust pipe bypass solenoid valve- Overdrive deactivation solen. valve- Switch for overdrive deactivation- Secondary air system status- Idle actuator, position- Engine stop request- intake manifold pressure- Oxygen sensor value (bank 1, sensor 3)- Oxygen sensor value (bank 1, sensor 4)- Oxygen sensor value (bank 2, sensor 3)- Oxygen sensor value (bank 2, sensor 4)- Lambda regulation (bank 1, sensor 2)- Air compressor switch off

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Gear box control
Transmission control ECT 2.2

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

					<ul style="list-style-type: none"> - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Hilux [N25] - Hilux 2.5 D-4D 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

2011/07	2KDFTV	2.5	102	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve
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					<ul style="list-style-type: none"> - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Hilux [N26] - Hilux 3.0 D-4D 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position

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Gear box control
Transmission control ECT 2.2

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

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Gear box control
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Kluger - Kluger 3.3i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

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- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve

Gear box control
Transmission control ECT 2.2

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

					<ul style="list-style-type: none"> - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser - Land Cruiser 4.5i 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test 	

- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor / fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

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Engine control
TCCS II V3

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay

					<ul style="list-style-type: none"> - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser - Land Cruiser 4.7i 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 	

Engine control
TCCS II V3

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

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				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4)

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

					<ul style="list-style-type: none"> - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Land Cruiser - Land Cruiser 4.5 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

1999/10 - 2007/02	1FZFE	4.5	224	Gear box control Transmission control ECT 2.2	<p>system</p> <ul style="list-style-type: none"> - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact
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					<ul style="list-style-type: none"> - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Land Cruiser Prado [J12] - Land Cruiser Prado 3.0 Diesel Turbo 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value

<p>2002/11 - 2007/07</p>	<p>1KDFTV</p>	<p>3.0</p>	<p>170</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4)
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- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2

					<ul style="list-style-type: none"> - Air control valve control motor - Ingestion control valve
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump

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Gear box control
Transmission control ECT 2.2

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply

					<ul style="list-style-type: none"> - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser Prado [J9] - Land Cruiser Prado 3.4i 24V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 	

1996/04 -	5VZFE	3.4	178 -	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1)
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- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Land Cruiser Prado [J9] - Land Cruiser Prado 2.7i 16V 4x4

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear

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Gear box control
Transmission control ECT 2.2

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

					<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser Prado [J9] - Land Cruiser Prado 3.0 Diesel Turbo 4x4	
Year	Engine	Liters	HP	System	Functions	

• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

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Gear box control
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

			<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
			<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2

<p>1996/04 - 2000/08</p>	<p>1KZTE</p>	<p>3.0</p>	<p>140 - 146</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

				<ul style="list-style-type: none"> - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3)

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

					<ul style="list-style-type: none"> - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser [J10] - Land Cruiser 4.2 Diesel Turbo 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system 	

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

1998/01 - 2004/06	1HDFTE	4.2	196 - 205	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve
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					<ul style="list-style-type: none"> - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					
Land Cruiser [J10] - Land Cruiser 4.5i 24V					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control

1998/01 -	1FZFE	4.5	224	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3)
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- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

- Ingestion control valve

TOYOTA

Land Cruiser [J20] - Land Cruiser 4.6i 4x4

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none">• Functional tests<ul style="list-style-type: none">- Diagnosis/electronics test- Gear selection- Evaporative emission control system leak test- Injected quantity• Adjustments / settings<ul style="list-style-type: none">- Adaptive parameters reset- Write vehicle identification number (VIN)• Current values<ul style="list-style-type: none">- Short-term AFR correction B2- Long-term AFR correction B2- Solenoid valve, swirl control- Sol. valve, variable intake system- Contact idle- Regulator idle mode: pulse-duty factor- kick-down switch- circuit compressor control- Winter switch- EGR valve - system- Oxygen sensor 1- Oxygen sensor 2- regulation factor fuel mixture content (lambda factor) 1- regulation factor fuel mixture content (lambda factor) 2- electric fuel pump- exhausted gases pressure regul. valve- fuel system - bank 1- fuel system - bank 2- Adjust. revolutions idle- Oil- Canister valve active carbon filter- Direct transmission Converter lockup- Tiptronic switch: lower gear engagement- Tiptronic switch: upper gear engagement- Air mass, actual value- exhausted gases recirculation control- secondary air switch. valve- Solenoid valve: switch. intake manifold 1- Solenoid valve: switch. intake manifold 1- EGR-magnetic valve step position- Ventilation solenoid valve- Lambda-control (bank 2, sensor 2)- Current gear- Lambda controller Lambda probe (B1,S1)- Lambda controller Lambda probe (B2,S1)- Charging-air pressure magnetic valve- Secondary system in limp-home mode- Exhaust pipe bypass solenoid valve- Overdrive deactivation solen. valve- Switch for overdrive deactivation- Secondary air system status- Idle actuator, position- Engine stop request- intake manifold pressure- Oxygen sensor value (bank 1, sensor 3)- Oxygen sensor value (bank 1, sensor 4)- Oxygen sensor value (bank 2, sensor 3)- Oxygen sensor value (bank 2, sensor 4)- Lambda regulation (bank 1, sensor 2)- Air compressor switch off

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Gear box control
Transmission control ECT 2.2

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

					<ul style="list-style-type: none"> - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser [J20] - Land Cruiser 4.5 D-4D 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control 	

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

2010/04 -	1VDFTV	4.5	235	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve
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					<ul style="list-style-type: none"> - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser [J6,J7,J10] - Land Cruiser 4.7i 32V 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position 	

Engine control
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

<p>1998/01 - 2008/07</p>	<p>2UZFE</p>	<p>4.7</p>	<p>235</p>	<ul style="list-style-type: none"> - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test
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- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

Gear box control
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					
Land Cruiser [J6,J7,J10] - Land Cruiser 4.7i 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2

Engine control
TCCS II V3

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

1998/01 - 2007/08	2UZFE	4.7	235	<ul style="list-style-type: none"> - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request

Gear box control
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

					<ul style="list-style-type: none"> - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser [J6,J7,J10] - Land Cruiser 4.5 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 	

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Engine control
TCCS II V3

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM

1998/03 - 2002/09	1FZFE	4.5	224	<ul style="list-style-type: none"> - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1

Gear box control
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status

- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

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Gear box control
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode

			<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
			<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2

1992/11 - 1999/11	1FZFE	4.5	212	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status
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- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

					<ul style="list-style-type: none"> - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Land Cruiser [J6,J7,J10] - Land Cruiser 4.0

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status

<p>1987/09 - 1990/01</p>	<p>3FE</p>	<p>4.0</p>	<p>152</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring
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					<ul style="list-style-type: none"> - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Land Cruiser [J6,J7,J10] - Land Cruiser 4.2 Diesel Turbo 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

1998/01 - 2008/07	1HDFTE	4.2	204	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve
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			<ul style="list-style-type: none"> - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
			<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control

2001/06	1HDFTE	4.2	205	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3)
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- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

- Ingestion control valve

TOYOTA

Land Cruiser [J7] - Land Cruiser 4.5i 24V

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2)

2000/05

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Engine control
TCCS II V3

- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1

					<ul style="list-style-type: none"> - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser [J7] - Land Cruiser 4.2 Diesel 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch 	

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean

1999/08 - 2004/06	1HZ	4.2	131	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve
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					<ul style="list-style-type: none"> - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser [J8] - Land Cruiser 4.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 	

<p>1990/01 - 1992/08</p>	<p>3FE</p>	<p>4.0</p>	<p>155 - 156</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode
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- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

1992/08 - 1998/01	1FZFE	4.5	205 - 215	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring
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					<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser [J8] - Land Cruiser 4.0i 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 	

<p>1990/01 - 1992/08</p>	<p>3FE</p>	<p>4.0</p>	<p>155</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1)
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- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Land Cruiser [J9] - Land Cruiser 3.4i 24V

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear

<p>1996/04 - 2006/12</p>	<p>5VZFE</p>	<p>3.4</p>	<p>178 - 185</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC
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					<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser [J9] - Land Cruiser 3.0 Diesel Turbo Intercooler	
Year	Engine	Liters	HP	System	Functions	

• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

1996/04
-
2002/09

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3.0

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Gear box control
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

					<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Land Cruiser [J9] - Land Cruiser 3.0 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda 	

<p>1996/04 - 2006/12</p>	<p>1KZTE</p>	<p>3.0</p>	<p>120 - 125</p>	<p>Gear box control Transmission control ECT 2.2</p>	<p>factor) 2</p> <ul style="list-style-type: none"> - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4)
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- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump

				<ul style="list-style-type: none"> - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position

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Gear box control
Transmission control ECT 2.2

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

					<ul style="list-style-type: none"> - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					MR2 [W3] Cabrio - MR2 1.8 16V Cabrio	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) 	

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

Engine control
TCCS II V3

- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve

1999/12 - 2006/05	1ZZFE	1.8	140	<ul style="list-style-type: none"> - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control

Gear box control
Transmission control ECT 2.2

- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)

- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor

- Ingestion control valve

TOYOTA

Matrix - Matrix 1.8

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none">• Functional tests<ul style="list-style-type: none">- Diagnosis/electronics test- Gear selection- Evaporative emission control system leak test- Injected quantity• Adjustments / settings<ul style="list-style-type: none">- Adaptive parameters reset- Write vehicle identification number (VIN)• Current values<ul style="list-style-type: none">- Short-term AFR correction B2- Long-term AFR correction B2- Solenoid valve, swirl control- Sol. valve, variable intake system- Contact idle- Regulator idle mode: pulse-duty factor- kick-down switch- circuit compressor control- Winter switch- EGR valve - system- Oxygen sensor 1- Oxygen sensor 2- regulation factor fuel mixture content (lambda factor) 1- regulation factor fuel mixture content (lambda factor) 2- electric fuel pump- exhausted gases pressure regul. valve- fuel system - bank 1- fuel system - bank 2- Adjust. revolutions idle- Oil- Canister valve active carbon filter- Direct transmission Converter lockup- Tiptronic switch: lower gear engagement- Tiptronic switch: upper gear engagement- Air mass, actual value- exhausted gases recirculation control- secondary air switch. valve- Solenoid valve: switch. intake manifold 1- Solenoid valve: switch. intake manifold 1- EGR-magnetic valve step position- Ventilation solenoid valve- Lambda-control (bank 2, sensor 2)- Current gear- Lambda controller Lambda probe (B1,S1)- Lambda controller Lambda probe (B2,S1)- Charging-air pressure magnetic valve- Secondary system in limp-home mode- Exhaust pipe bypass solenoid valve- Overdrive deactivation solen. valve- Switch for overdrive deactivation- Secondary air system status- Idle actuator, position- Engine stop request- intake manifold pressure- Oxygen sensor value (bank 1, sensor 3)- Oxygen sensor value (bank 1, sensor 4)- Oxygen sensor value (bank 2, sensor 3)- Oxygen sensor value (bank 2, sensor 4)- Lambda regulation (bank 1, sensor 2)- Air compressor switch off

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Engine control
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

				<ul style="list-style-type: none"> - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda)

2002/09 - 2008/08	1ZZFE	1.8	120	Engine control TCCS II V3	<ul style="list-style-type: none"> factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2)
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- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve

					<ul style="list-style-type: none"> - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					
Matrix - Matrix 1.8 4x4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1)

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Engine control
TCCS II V3

- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD

					<ul style="list-style-type: none"> - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Picnic - Picnic 2.0i	
Year	Engine	Liters	HP	System	Functions
					• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported

Engine control
TCCS II V3

- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator

2003/08	1AZFE	2.0	150	<ul style="list-style-type: none"> - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle

Gear box control
Transmission control ECT 2.2

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation

				<ul style="list-style-type: none"> - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4)

Engine control
TCCS II V3

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

1997/04 - 2003/07	1AZFE	2.0	150	<ul style="list-style-type: none"> - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system

Gear box control

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

Transmission control ECT 2.2

- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve

					<ul style="list-style-type: none"> - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Picnic - Picnic 2.0i 16V

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear

<p>1996/09 - 2001/05</p>	<p>3SFE</p>	<p>2.0</p>	<p>133</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC
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					<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Picnic - Picnic 2.2 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions

• Functional tests

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• Adjustments / settings

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

1997/09
-
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Gear box control
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

					<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Previa - Previa 2.4i 16V 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda 	

Engine control
TCCS II V3

factor) 2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)

- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump

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- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position

Gear box control
Transmission control ECT 2.2

- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring

				<ul style="list-style-type: none"> - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Engine control
TCCS II V3

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve

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- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)

Gear box control
Transmission control ECT 2.2

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test

- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay

					<ul style="list-style-type: none"> - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Previa - Previa 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 	

Engine control
TCCS II V3

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

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-				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4)

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

				<ul style="list-style-type: none"> - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Previa - Previa 2.4i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

1990/09 - 1999/12	2TZFE	2.4	132	Gear box control Transmission control ECT 2.2	<p>system</p> <ul style="list-style-type: none"> - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact
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				<ul style="list-style-type: none"> - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position

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Gear box control
Transmission control ECT 2.2

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Previa - Previa 2.0 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump 	

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Gear box control
Transmission control ECT 2.2

- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

					<ul style="list-style-type: none"> - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Prius - Prius 1.5i
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve

Engine control
TCCS II V3

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring

<p>1997/12 - 2003/09</p>	<p>1NZFXE</p>	<p>1.5</p>	<p>58 - 72</p>	<ul style="list-style-type: none"> - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2
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- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

Gear box control
Transmission control ECT 2.2

- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air

				<ul style="list-style-type: none"> - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1

2003/09	1NZFXE	1.5	78	Engine control TCCS II V3	<ul style="list-style-type: none"> - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode
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- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

Engine control
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

2000/09 - 2003/08	1NZFXE	1.5	72		<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2

Gear box control
Transmission control ECT 2.2

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

					<ul style="list-style-type: none"> - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Prius [W20] - Prius 1.5i
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode

2003/09
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Engine control
TCCS II V3

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

					<ul style="list-style-type: none"> - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					RAV4 - RAV4 2.0i 4WD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test 	

- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor / fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

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Engine control
TCCS II V3

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay

					<ul style="list-style-type: none"> - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					RAV4 - RAV4 1.8i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 	

<p>2000/05 - 2005/11</p>	<p>1ZZFE</p>	<p>1.8</p>	<p>125</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4)
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- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1

					<ul style="list-style-type: none"> - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	RAV4 - RAV4 2.4i 4x4
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status

Engine control
TCCS II V3

- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring

2003/07 - 2006/01	2AZFE	2.4	163	<ul style="list-style-type: none"> - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

Gear box control
Transmission control ECT 2.2

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve

					<ul style="list-style-type: none"> - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					RAV4 - RAV4 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value 	

2005/11 -	2AZFE	2.4	170	Engine control TCCS II V3	<ul style="list-style-type: none"> - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4)
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- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2

					<ul style="list-style-type: none"> - Air control valve control motor - Ingestion control valve
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TOYOTA				RAV4 - RAV4 2.4i 4WD	
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2)

Engine control
TCCS II V3

- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1

2005/11	2AZFE	2.4	170	<ul style="list-style-type: none"> - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2

Gear box control
Transmission control ECT 2.2

- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)

- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve

					<ul style="list-style-type: none"> - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					RAV4 - RAV4 2.0i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear 	

<p>1995/09 - 1998/08</p>	<p>3SFE</p>	<p>2.0</p>	<p>120</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC
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					<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				RAV4 [A1] - RAV4 2.0i 16V 4x4	
Year	Engine	Liters	HP	System	Functions

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

Engine control
TCCS II V3

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode

1995/11
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2000/08

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2.0

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- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2

Gear box control
Transmission control ECT 2.2

- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status

- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1

				<ul style="list-style-type: none"> - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3)

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Engine control
TCCS II V3

- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring

				<ul style="list-style-type: none"> - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

- 2000/08	3SGE	2.0	165	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve
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				<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode

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Gear box control
Transmission control ECT 2.2

- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU

				<ul style="list-style-type: none"> - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

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Gear box control
Transmission control ECT 2.2

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil

					<ul style="list-style-type: none"> - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA						RAV4 [A1] Cabrio - RAV4 2.0i 16V Cabrio 4x4					
Year	Engine	Liters	HP	System	Functions						
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup 						

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Gear box control
Transmission control ECT 2.2

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation

				<ul style="list-style-type: none"> - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1

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Gear box control
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				RAV4 [A2] - RAV4 1.8i 16V	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control

- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring

Engine control
TCCS II V3

- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve

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- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)

Gear box control
Transmission control ECT 2.2

- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN

					<ul style="list-style-type: none"> - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				RAV4 [A2] - RAV4 2.0 VVT-i 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

Engine control
TCCS II V3

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<p>2000/05 - 2005/11</p>	<p>1AZFE</p>	<p>2.0</p>	<p>150</p>		<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil

Gear box control
Transmission control ECT 2.2

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1

					<ul style="list-style-type: none"> - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	RAV4 [A2] - RAV4 2.4i
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request

Engine control
TCCS II V3

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

2003/09 - 2005/11	2AZFE	2.4	170	<ul style="list-style-type: none"> - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor

- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean

Gear box control
Transmission control ECT 2.2

- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve

					<ul style="list-style-type: none"> - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				RAV4 [A2] - RAV4 2.4i 4x4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1

Engine control
TCCS II V3

- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status

- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

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• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported

Gear box control
Transmission control ECT 2.2

- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode

					<ul style="list-style-type: none"> - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					RAV4 [A2] - RAV4 2.0 VVT-i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 	

Engine control
TCCS II V3

- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)

- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control

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- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status

Gear box control
Transmission control ECT 2.2

- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring

					<ul style="list-style-type: none"> - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					RAV4 [A2] - RAV4 2.0 Diesel Turbo	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) 	

• Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

2001/05 - 2005/11	1CDFTV	2.0	116	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve
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					<ul style="list-style-type: none"> - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					RAV4 [A3] - RAV4 2.4 4X4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter 	

Engine control
TCCS II V3

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1

2005/11 - 2012/11	2AZFE	2.4	170	<ul style="list-style-type: none"> - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off

Gear box control
Transmission control ECT 2.2

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

					<ul style="list-style-type: none"> - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				RAV4 [A3] - RAV4 2.2 D-4D	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean

2005/11 - 2012/11	2ADFTV	2.2	136 - 150	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve
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					<ul style="list-style-type: none"> - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				RAV4 [A3] - RAV4 2.0	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1

2008/12
-
2012/11

3ZRFAE

2.0

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Gear box control
Transmission control ECT 2.2

- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode

- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve

2005/11
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2007/10

5GRFE

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Engine control
TCCS II V3

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Reiz - Reiz 3.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 	

2005/11 -	3GRFE	3.0	231	Engine control TCCS II V3	<ul style="list-style-type: none"> - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1)
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- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Sequoia - Sequoia 4.7**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear

Engine control
TCCS II V3

- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC

2000/09 - 2007/08	2UZFE	4.7	243 - 277	<ul style="list-style-type: none"> - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity 				

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda

Gear box control
Transmission control ECT 2.2

actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve

					<ul style="list-style-type: none"> - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Sequoia - Sequoia 4.7 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 	

Engine control
TCCS II V3

- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)

- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1

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				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4)

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

					<ul style="list-style-type: none"> - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Sienna - Sienna 3.0	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system 	

- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system

Engine control
TCCS II V3

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve

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- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve

Gear box control
Transmission control ECT 2.2

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system

Engine control
TCCS II V3

- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

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• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve

Gear box control
Transmission control ECT 2.2

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Sienna - Sienna 3.3 4x4
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation

Engine control
TCCS II V3

- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring

2003/09 - 2006/08	3MZFE	3.3	234	<ul style="list-style-type: none"> - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
				<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

Gear box control
Transmission control ECT 2.2

system

- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact

				<ul style="list-style-type: none"> - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position

Engine control
TCCS II V3

- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count

<p>2004/09 - 2005/08</p>	<p>3MZFE</p>	<p>3.3</p>	<p>234</p>	<ul style="list-style-type: none"> - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test
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- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

Gear box control
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Sienna - Sienna 3.5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 	

2006/09	2GRFE	3.5	270	Engine control TCCS II V3	<ul style="list-style-type: none"> - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor
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- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

					<ul style="list-style-type: none"> - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Solara Convertible - Solara 2.2 Convertible
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve

Engine control
TCCS II V3

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

1999/09 - 2001/08	5SFE	2.2	134	<ul style="list-style-type: none"> - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 				

- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich

Gear box control
Transmission control ECT 2.2

- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM

					<ul style="list-style-type: none"> - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Solara Convertible - Solara 3.0 Convertible	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup 	

Engine control
TCCS II V3

- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal

- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation

1999/09 - 2003/08	1MZFE	3.0	201	<ul style="list-style-type: none"> - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1

Gear box control
Transmission control ECT 2.2

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Solara Convertible - Solara 2.4 Convertible	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch 	

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Engine control
TCCS II V3

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve

					<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
<p>2001/09 - 2008/08</p>	<p>2AZFE</p>	<p>2.4</p>	<p>157</p>		<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve

Gear box control
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

					<ul style="list-style-type: none"> - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Solara Convertible - Solara 3.3 Convertible	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test 	

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

Engine control
TCCS II V3

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

2003/09 - 2008/08	3MZFE	3.3	213 - 228	<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil

Gear box control
Transmission control ECT 2.2

- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)

- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1

					<ul style="list-style-type: none"> - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Solara Coupe - Solara 2.2 Coupe

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure

Engine control
TCCS II V3

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

1998/09 - 2001/08	5SFE	2.2	134	<ul style="list-style-type: none"> - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean

Gear box control
Transmission control ECT 2.2

- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve

					<ul style="list-style-type: none"> - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Solara Coupe - Solara 3.0 Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 	

Engine control
TCCS II V3

- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode

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- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported

Gear box control
Transmission control ECT 2.2

- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator

					<ul style="list-style-type: none"> - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Solara Coupe - Solara 2.4 Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 	

Engine control
TCCS II V3

- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor

2)

- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump

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				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request

Gear box control
Transmission control ECT 2.2

- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems

					<ul style="list-style-type: none"> - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Solara Coupe - Solara 3.3 Coupe					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean

Engine control
TCCS II V3

- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil

2003/09 - 2008/08	3MZFE	3.3	213 - 228	<ul style="list-style-type: none"> - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve

Gear box control
Transmission control ECT 2.2

- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)

- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

TOYOTA

Soluna Vios - Soluna Vios 1.5i

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1

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Engine control
TCCS II V3

- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status

					<ul style="list-style-type: none"> - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Starlet [P8] - Starlet 1.3i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch 	

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

- 1996/01	4EFE	1.3	135	Gear box control Transmission control ECT 2.2	<ul style="list-style-type: none"> - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve
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				<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve

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Gear box control
Transmission control ECT 2.2

- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS

					<ul style="list-style-type: none"> - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Starlet [P8] - Starlet 1.3i 12V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test 	

- Gear selection
- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported

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Gear box control
Transmission control ECT 2.2

- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1

					<ul style="list-style-type: none"> - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Starlet [P9] - Starlet 1.3i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump 	

<p>1996/01 - 1999/07</p>	<p>4EFE</p>	<p>1.3</p>	<p>82 - 84</p>	<p>Gear box control Transmission control ECT 2.2</p>	<ul style="list-style-type: none"> - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2)
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- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve

					<ul style="list-style-type: none"> - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Starlet [P9] - Starlet 1.3i 16V Turbo**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve

1996/01
-
1999/07

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Gear box control
Transmission control ECT 2.2

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring

					<ul style="list-style-type: none"> - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					T100 - T100 2.7i 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings 	

- Adaptive parameters reset
- Write vehicle identification number (VIN)
- **Current values**
- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value

1993/09 - 1998/08	3RZFE	2.7	150	Engine control TCCS II V3	<ul style="list-style-type: none"> - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system
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					<ul style="list-style-type: none"> - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Tacoma - Tacoma 2.4i					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle

Engine control
TCCS II V3

- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)

- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation

1995/01 - 2004/08	2RZFE	2.4	141	<ul style="list-style-type: none"> - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4)

Gear box control
Transmission control ECT 2.2

- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring

					<ul style="list-style-type: none"> - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Tacoma - Tacoma 3.4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle

- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle

Engine control
TCCS II V3

- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve

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- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)

Gear box control
Transmission control ECT 2.2

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system

Engine control
TCCS II V3

- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

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• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve

Gear box control
Transmission control ECT 2.2

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA Tacoma - Tacoma 2.7 4x4

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve

Engine control
TCCS II V3

- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring

1994/09 - 2003/09	3RZFE	2.7	150	<ul style="list-style-type: none"> - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time
				<ul style="list-style-type: none"> • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

Gear box control
Transmission control ECT 2.2

- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air

					<ul style="list-style-type: none"> - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Tacoma - Tacoma 2.7i	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement

Engine control
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor

1995/01 -	2RZFE	2.7	150	<ul style="list-style-type: none"> - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve <hr/> <ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve
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Gear box control
Transmission control ECT 2.2

- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring

					<ul style="list-style-type: none"> - Throttle valve actuator power supply - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Tacoma - Tacoma 4.0 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system 	

- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)

-	1GRFE	4.0	238	TCCS II V3	<ul style="list-style-type: none"> - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve
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					<ul style="list-style-type: none"> - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Tacoma - Tacoma 2.7	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2)

Engine control
TCCS II V3

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

<p>1994/09 - 2003/09</p>	<p>3RZFE</p>	<p>2.7</p>	<p>152</p>		<ul style="list-style-type: none"> - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test
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- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

Gear box control
Transmission control ECT 2.2

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay

					<ul style="list-style-type: none"> - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Tacoma - Tacoma 2.4i 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve 	

Engine control
TCCS II V3

- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)

- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve

1994/09 - 2004/08	2RZFE	2.4	141	<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3)

Gear box control
Transmission control ECT 2.2

- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring

					<ul style="list-style-type: none"> - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Tacoma - Tacoma 4.0	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control

- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the

2004/09 -	1GRFE	4.0	238	Gear box control Transmission control ECT 2.2	<p>system</p> <ul style="list-style-type: none"> - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact
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					<ul style="list-style-type: none"> - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Tundra - Tundra 4.7	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value 	

Engine control
TCCS II V3

- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)

- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2

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				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump

Gear box control
Transmission control ECT 2.2

- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply

					<ul style="list-style-type: none"> - Engine run time • Actuators - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Tundra - Tundra 4.7 4x4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 	

Engine control
TCCS II V3

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

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- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection
- Evaporative emission control system leak test
- Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve

Gear box control
Transmission control ECT 2.2

- Overdrive deactivation solenoid valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- Intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control

					<ul style="list-style-type: none"> - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA				Tundra - Tundra 3.4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity

• **Adjustments / settings**

- Adaptive parameters reset
- Write vehicle identification number (VIN)

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda

Engine control
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actual value

- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve

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- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

- **Functional tests**
 - Diagnosis/electronics test
 - Gear selection
 - Evaporative emission control system leak test
 - Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement

Gear box control
Transmission control ECT 2.2

- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve

- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve

					<ul style="list-style-type: none"> - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA **Tundra - Tundra 3.4 4x4**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4)

Engine control
TCCS II V3

- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring

1999/09 - 2004/08	5VZFE	3.4	193		<ul style="list-style-type: none"> - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch

- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)

Gear box control
Transmission control ECT 2.2

- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve

					<ul style="list-style-type: none"> - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	VIOS - VIOS 1.3i
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve

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Engine control
TCCS II V3

- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2

- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time

• **Actuators**

- Stepping motor, adjust. Idle mode
- Turbo compressor regulator
- Intake manifold change-over valve 1
- Intake manifold change-over valve 2
- Fuel pump relay
- Fuel blocking valve
- EGR valve - system
- fuel evaporation pressure sensor
- turbo charger regulating valve
- Oil
- LL-controller PWM
- Solenoid valve: secondary air
- Air conditioner compressor contact
- Fuel pressure increase, solenoid valve
- Intake air swirl, solenoid valve
- Idle increase solenoid valve
- Vent inhibit solenoid valve
- Overdrive deactivation solenoid valve
- Exhaust pipe bypass solenoid valve
- Slip control solenoid valve
- Bypass valve, evaporative emiss. control
- Switchable intake manifold, solenoid valve
- Air control valve
- Engine mounting control
- Electrical fuel pump
- Tank leakage pump
- Air relief valve
- Air control valve
- Pressure-regulation magnetic valve 1
- Variable valve timing, bank 1
- Fuel pressure regulation
- Exhaust gas pressure control valve 1
- Fuel shut-off solenoid valve 1
- Cooling fan actuation
- HC absorber solenoid valve
- EGR stepper motor
- Variable valve timing Bank 2
- Air control valve control motor
- Ingestion control valve

• **Functional tests**

- Diagnosis/electronics test
- Gear selection

- Evaporative emission control system leak test
- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported

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Engine control
TCCS II V3

- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2

				<ul style="list-style-type: none"> - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter

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Engine control
TCCS II V3

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1

					<ul style="list-style-type: none"> - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	VIOS - VIOS 1.5
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure

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Engine control
TCCS II V3

- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system

					<ul style="list-style-type: none"> - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					VIOS - VIOS 1.5i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 	

- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich

2006/07	3SZ	1.5	102	Engine control TCCS II V3	<ul style="list-style-type: none"> - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air
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					<ul style="list-style-type: none"> - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Wish - Wish 2.0i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement 	

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Engine control
TCCS II V3

- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)

- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1
 - Cooling fan actuation
 - HC absorber solenoid valve
 - EGR stepper motor

					<ul style="list-style-type: none"> - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Yaris - Yaris 1.0i 16V
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4)

<p>1999/01 - 2002/12</p>	<p>1SZFE</p>	<p>1.0</p>	<p>68</p>	<p>Engine control TCCS II V3</p>	<ul style="list-style-type: none"> - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring
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			<ul style="list-style-type: none"> - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
			<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1

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Engine control
TCCS II V3

- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)

- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control

					<ul style="list-style-type: none"> - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Yaris - Yaris 1.3i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) 	

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Engine control
TCCS II V3

- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU

				<ul style="list-style-type: none"> - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time <p>• Actuators</p> <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<p>• Functional tests</p> <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test

- Injected quantity
- **Adjustments / settings**
 - Adaptive parameters reset
 - Write vehicle identification number (VIN)
- **Current values**
 - Short-term AFR correction B2
 - Long-term AFR correction B2
 - Solenoid valve, swirl control
 - Sol. valve, variable intake system
 - Contact idle
 - Regulator idle mode: pulse-duty factor
 - kick-down switch
 - circuit compressor control
 - Winter switch
 - EGR valve - system
 - Oxygen sensor 1
 - Oxygen sensor 2
 - regulation factor / fuel mixture content (lambda factor) 1
 - regulation factor fuel mixture content (lambda factor) 2
 - electric fuel pump
 - exhausted gases pressure regul. valve
 - fuel system - bank 1
 - fuel system - bank 2
 - Adjust. revolutions idle
 - Oil
 - Canister valve active carbon filter
 - Direct transmission Converter lockup
 - Tiptronic switch: lower gear engagement
 - Tiptronic switch: upper gear engagement
 - Air mass, actual value
 - exhausted gases recirculation control
 - secondary air switch. valve
 - Solenoid valve: switch. intake manifold 1
 - Solenoid valve: switch. intake manifold 1
 - EGR-magnetic valve step position
 - Ventilation solenoid valve
 - Lambda-control (bank 2, sensor 2)
 - Current gear
 - Lambda controller Lambda probe (B1,S1)
 - Lambda controller Lambda probe (B2,S1)
 - Charging-air pressure magnetic valve
 - Secondary system in limp-home mode
 - Exhaust pipe bypass solenoid valve
 - Overdrive deactivation solen. valve
 - Switch for overdrive deactivation
 - Secondary air system status
 - Idle actuator, position
 - Engine stop request
 - intake manifold pressure
 - Oxygen sensor value (bank 1, sensor 3)
 - Oxygen sensor value (bank 1, sensor 4)
 - Oxygen sensor value (bank 2, sensor 3)
 - Oxygen sensor value (bank 2, sensor 4)
 - Lambda regulation (bank 1, sensor 2)
 - Air compressor switch off
 - Stop light switch 1
 - Ingestion control valve
 - Air relief valve
 - Fuel tank leakage diagnostic pump
 - Air system
 - Catalyst completed
 - Heated catalyst supported
 - Secondary air system supported
 - Oxygen sensor supported
 - Oxygen sensor heating supported
 - Diagnosis mode

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Engine control
TCCS II V3

- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay

					<ul style="list-style-type: none"> - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Yaris - Yaris 1.5i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 	

2001/01 - 2005/08	1NZ-FE	1.5	106	Engine control TCCS II V3	<ul style="list-style-type: none"> - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for ovedrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4)
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- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1

					<ul style="list-style-type: none"> - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA	Yaris - Yaris 1.3 VVT-i
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status

2006/01 -	2NZFE	1.3	87	Engine control TCCS II V3	<ul style="list-style-type: none"> - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off - Stop light switch 1 - Ingestion control valve - Air relief valve - Fuel tank leakage diagnostic pump - Air system - Catalyst completed - Heated catalyst supported - Secondary air system supported - Oxygen sensor supported - Oxygen sensor heating supported - Diagnosis mode - Oxygen sensor (bank 2, sensor 1) Lambda actual value - Lambda sensor (B1,S1) Lambda actual value - LS (b1, s1) switch time rich to lean - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring
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					<ul style="list-style-type: none"> - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Yaris Verso - Yaris Verso 1.5i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) 	

• **Current values**

- Short-term AFR correction B2
- Long-term AFR correction B2
- Solenoid valve, swirl control
- Sol. valve, variable intake system
- Contact idle
- Regulator idle mode: pulse-duty factor
- kick-down switch
- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean

1999/08 - 2005/09	1NZFE	1.5	110	Engine control TCCS II V3	<ul style="list-style-type: none"> - LS (b2, s1) switch time rich to lean - LS (b1, s1) switch time lean to rich - LS (b2, s1) switch time lean to rich - Tank ventilation system: vapour pressure in the system - Throttle valve closing duty cycle - LS (b1,s2) switch time rich to lean - LS (b2,s2) switch time rich to lean - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve
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					<ul style="list-style-type: none"> - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Yaris Verso - Yaris Verso 1.3i 16V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter 	

2000/03
-
2005/09

2NZFE

1.3

86

Engine control
TCCS II V3

- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status

- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down
- System power mode status
- Engine speed on misfiring
- Engine load on misfiring
- Throttle valve actuator power supply
- Engine run time
- **Actuators**
 - Stepping motor, adjust. Idle mode
 - Turbo compressor regulator
 - Intake manifold change-over valve 1
 - Intake manifold change-over valve 2
 - Fuel pump relay
 - Fuel blocking valve
 - EGR valve - system
 - fuel evaporation pressure sensor
 - turbo charger regulating valve
 - Oil
 - LL-controller PWM
 - Solenoid valve: secondary air
 - Air conditioner compressor contact
 - Fuel pressure increase, solenoid valve
 - Intake air swirl, solenoid valve
 - Idle increase solenoid valve
 - Vent inhibit solenoid valve
 - Overdrive deactivation solenoid valve
 - Exhaust pipe bypass solenoid valve
 - Slip control solenoid valve
 - Bypass valve, evaporative emiss. control
 - Switchable intake manifold, solenoid valve
 - Air control valve
 - Engine mounting control
 - Electrical fuel pump
 - Tank leakage pump
 - Air relief valve
 - Air control valve
 - Pressure-regulation magnetic valve 1
 - Variable valve timing, bank 1
 - Fuel pressure regulation
 - Exhaust gas pressure control valve 1
 - Fuel shut-off solenoid valve 1

				<ul style="list-style-type: none"> - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
				<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch - circuit compressor control - Winter switch - EGR valve - system - Oxygen sensor 1 - Oxygen sensor 2 - regulation factor fuel mixture content (lambda factor) 1 - regulation factor fuel mixture content (lambda factor) 2 - electric fuel pump - exhausted gases pressure regul. valve - fuel system - bank 1 - fuel system - bank 2 - Adjust. revolutions idle - Oil - Canister valve active carbon filter - Direct transmission Converter lockup - Tiptronic switch: lower gear engagement - Tiptronic switch: upper gear engagement - Air mass, actual value - exhausted gases recirculation control - secondary air switch. valve - Solenoid valve: switch. intake manifold 1 - Solenoid valve: switch. intake manifold 1 - EGR-magnetic valve step position - Ventilation solenoid valve - Lambda-control (bank 2, sensor 2) - Current gear - Lambda controller Lambda probe (B1,S1) - Lambda controller Lambda probe (B2,S1) - Charging-air pressure magnetic valve - Secondary system in limp-home mode - Exhaust pipe bypass solenoid valve - Overdrive deactivation solen. valve - Switch for overdrive deactivation - Secondary air system status - Idle actuator, position - Engine stop request - intake manifold pressure - Oxygen sensor value (bank 1, sensor 3) - Oxygen sensor value (bank 1, sensor 4) - Oxygen sensor value (bank 2, sensor 3) - Oxygen sensor value (bank 2, sensor 4) - Lambda regulation (bank 1, sensor 2) - Air compressor switch off

1999/08
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2005/09

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1.3

86

Engine control
TCCS II V3

- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean
- Oxygen sensor monitoring
- Lean sensor current(bank 1,sensor 1)
- Lean sensor current(bank 1,sensor 2)
- Lean sensor mixture correction (B1,S1)
- Lean sensor mixture correction (B1,S2)
- Lambda control/Lambda sensor (B1,S2)
- Lambda control/Lambda sensor (B1,S3)
- Lambda control/Lambda sensor (B1,S4)
- Lambda control, oxygen sensor (bank 2, sensor 2)
- Lambda control/Lambda sensor (B2,S3)
- Lambda control/Lambda sensor (B2,S4)
- Air conditioner monitoring status
- Oxygen sensor status (B1, S2)
- Oxygen sensor status (bank 2, sensor 2)
- Fuel shutoff status
- Electrical power steering, signal
- Air bypass solenoid valve
- Oxygen sensor voltage (bank 1-sensor 3)
- Oxygen sensor voltage (bank 1, sensor 4)
- Oxygen sensor voltage (bank 2, sensor 3)
- Oxygen sensor voltage (bank 2, sensor 4)
- Evap. emissions control regulating valve status
- Sports mode
- Fault codes count
- Throttle valve position 2
- Solenoid switch valve DSU
- Solenoid switch valve SLC
- Solenoid shift valve SLD
- Switch solenoid valve SLN
- Solenoid shift valve SLS
- Switch solenoid valve SLU
- Catalytic converter control
- Evapor. emission control monitoring
- Secondary air system monitoring
- Air conditioner monitoring
- Lambda sensor heating circuit monitoring
- Monitoring of sub-systems
- Monitoring of fuel system
- Misfire detection monitoring
- EGR system monitoring
- Evapor. emission control monitoring
- Heated catalyt. converter monitoring
- DK control motor actuation current 1
- Gear down

					<ul style="list-style-type: none"> - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve - Overdrive deactivation solenoid valve - Exhaust pipe bypass solenoid valve - Slip control solenoid valve - Bypass valve, evaporative emiss. control - Switchable intake manifold, solenoid valve - Air control valve - Engine mounting control - Electrical fuel pump - Tank leakage pump - Air relief valve - Air control valve - Pressure-regulation magnetic valve 1 - Variable valve timing, bank 1 - Fuel pressure regulation - Exhaust gas pressure control valve 1 - Fuel shut-off solenoid valve 1 - Cooling fan actuation - HC absorber solenoid valve - EGR stepper motor - Variable valve timing Bank 2 - Air control valve control motor - Ingestion control valve
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TOYOTA					Yaris [P9, JTD] - Yaris 1.0 VVT-i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Diagnosis/electronics test - Gear selection - Evaporative emission control system leak test - Injected quantity • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Write vehicle identification number (VIN) • Current values <ul style="list-style-type: none"> - Short-term AFR correction B2 - Long-term AFR correction B2 - Solenoid valve, swirl control - Sol. valve, variable intake system - Contact idle - Regulator idle mode: pulse-duty factor - kick-down switch 	

- circuit compressor control
- Winter switch
- EGR valve - system
- Oxygen sensor 1
- Oxygen sensor 2
- regulation factor fuel mixture content (lambda factor) 1
- regulation factor fuel mixture content (lambda factor) 2
- electric fuel pump
- exhausted gases pressure regul. valve
- fuel system - bank 1
- fuel system - bank 2
- Adjust. revolutions idle
- Oil
- Canister valve active carbon filter
- Direct transmission Converter lockup
- Tiptronic switch: lower gear engagement
- Tiptronic switch: upper gear engagement
- Air mass, actual value
- exhausted gases recirculation control
- secondary air switch. valve
- Solenoid valve: switch. intake manifold 1
- Solenoid valve: switch. intake manifold 1
- EGR-magnetic valve step position
- Ventilation solenoid valve
- Lambda-control (bank 2, sensor 2)
- Current gear
- Lambda controller Lambda probe (B1,S1)
- Lambda controller Lambda probe (B2,S1)
- Charging-air pressure magnetic valve
- Secondary system in limp-home mode
- Exhaust pipe bypass solenoid valve
- Overdrive deactivation solen. valve
- Switch for overdrive deactivation
- Secondary air system status
- Idle actuator, position
- Engine stop request
- intake manifold pressure
- Oxygen sensor value (bank 1, sensor 3)
- Oxygen sensor value (bank 1, sensor 4)
- Oxygen sensor value (bank 2, sensor 3)
- Oxygen sensor value (bank 2, sensor 4)
- Lambda regulation (bank 1, sensor 2)
- Air compressor switch off
- Stop light switch 1
- Ingestion control valve
- Air relief valve
- Fuel tank leakage diagnostic pump
- Air system
- Catalyst completed
- Heated catalyst supported
- Secondary air system supported
- Oxygen sensor supported
- Oxygen sensor heating supported
- Diagnosis mode
- Oxygen sensor (bank 2, sensor 1) Lambda actual value
- Lambda sensor (B1,S1) Lambda actual value
- LS (b1, s1) switch time rich to lean
- LS (b2, s1) switch time rich to lean
- LS (b1, s1) switch time lean to rich
- LS (b2, s1) switch time lean to rich
- Tank ventilation system: vapour pressure in the system
- Throttle valve closing duty cycle
- LS (b1,s2) switch time rich to lean
- LS (b2,s2) switch time rich to lean

2005/08 - 2011/07	1KRFE	1.0	69	Engine control TCCS II V3	<ul style="list-style-type: none"> - Oxygen sensor monitoring - Lean sensor current(bank 1,sensor 1) - Lean sensor current(bank 1,sensor 2) - Lean sensor mixture correction (B1,S1) - Lean sensor mixture correction (B1,S2) - Lambda control/Lambda sensor (B1,S2) - Lambda control/Lambda sensor (B1,S3) - Lambda control/Lambda sensor (B1,S4) - Lambda control, oxygen sensor (bank 2, sensor 2) - Lambda control/Lambda sensor (B2,S3) - Lambda control/Lambda sensor (B2,S4) - Air conditioner monitoring status - Oxygen sensor status (B1, S2) - Oxygen sensor status (bank 2, sensor 2) - Fuel shutoff status - Electrical power steering, signal - Air bypass solenoid valve - Oxygen sensor voltage (bank 1-sensor 3) - Oxygen sensor voltage (bank 1, sensor 4) - Oxygen sensor voltage (bank 2, sensor 3) - Oxygen sensor voltage (bank 2, sensor 4) - Evap. emissions control regulating valve status - Sports mode - Fault codes count - Throttle valve position 2 - Solenoid switch valve DSU - Solenoid switch valve SLC - Solenoid shift valve SLD - Switch solenoid valve SLN - Solenoid shift valve SLS - Switch solenoid valve SLU - Catalytic converter control - Evapor. emission control monitoring - Secondary air system monitoring - Air conditioner monitoring - Lambda sensor heating circuit monitoring - Monitoring of sub-systems - Monitoring of fuel system - Misfire detection monitoring - EGR system monitoring - Evapor. emission control monitoring - Heated catalyt. converter monitoring - DK control motor actuation current 1 - Gear down - System power mode status - Engine speed on misfiring - Engine load on misfiring - Throttle valve actuator power supply - Engine run time • Actuators <ul style="list-style-type: none"> - Stepping motor, adjust. Idle mode - Turbo compressor regulator - Intake manifold change-over valve 1 - Intake manifold change-over valve 2 - Fuel pump relay - Fuel blocking valve - EGR valve - system - fuel evaporation pressure sensor - turbo charger regulating valve - Oil - LL-controller PWM - Solenoid valve: secondary air - Air conditioner compressor contact - Fuel pressure increase, solenoid valve - Intake air swirl, solenoid valve - Idle increase solenoid valve - Vent inhibit solenoid valve
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				<ul style="list-style-type: none">- Overdrive deactivation solenoid valve- Exhaust pipe bypass solenoid valve- Slip control solenoid valve- Bypass valve, evaporative emiss. control- Switchable intake manifold, solenoid valve- Air control valve- Engine mounting control- Electrical fuel pump- Tank leakage pump- Air relief valve- Air control valve- Pressure-regulation magnetic valve 1- Variable valve timing, bank 1- Fuel pressure regulation- Exhaust gas pressure control valve 1- Fuel shut-off solenoid valve 1- Cooling fan actuation- HC absorber solenoid valve- EGR stepper motor- Variable valve timing Bank 2- Air control valve control motor- Ingestion control valve
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[C30 - C30 1.6](#)

[C30 - C30 1.8](#)

[C30 - C30 2.0](#)

[C30 - C30 2.4i](#)

[C30 - C30 T5](#)

[C30 - C30 1.6D DRIVe](#)

[C30 - C30 2.0D](#)

[C30 - C30 D5](#)

[C30 - C30 1.8 F Flexifuel](#)

[C30 - C30 2.0 F Flexifuel](#)

[C30 - C30 Electric](#)

[C30 - C30 D2 DRIVe](#)

[C30 - C30 D3](#)

[C30 - C30 D4](#)

[C70 Coupe - C70 2.3 T5 Coupe](#)

[C70 Coupe - C70 2.4 20V Coupe](#)

[C70 Coupe - C70 2.0 T Coupe](#)

[C70 Coupe - C70 2.4 T Coupe](#)

[C70 Coupe - C70 2.5 LPT Coupe](#)

[C70 Coupe - C70 2.5 20V Coupe](#)

[C70 I Cabrio - C70 I 2.3 T5 Cabrio](#)

[C70 I Cabrio - C70 I 2.4 Cabrio](#)

[C70 I Cabrio - C70 I 2.4 T Cabrio](#)

[C70 I Cabrio - C70 I 2.0 T Cabrio](#)

[C70 I Cabrio - C70 I 2.4 T5 Cabrio](#)

[C70 II - C70 II 2.4](#)

[C70 II - C70 II 2.4i](#)

[C70 II - C70 II T5](#)

[C70 II - C70 II D5](#)

[C70 II - C70 II 2.4D](#)

[C70 II - C70 II 2.0D](#)

[C70 II - C70 II D3](#)

[C70 II - C70 II D4](#)

[S40 II - S40 II 2.4](#)

[S40 II - S40 II 2.5 T5](#)

[S40 II - S40 II 2.0D](#)

[S40 II - S40 II 1.6D DRIVe](#)

[S40 II - S40 II 1.8](#)

[S40 II - S40 II 1.6](#)

[S40 II - S40 II 2.5 T5 AWD](#)

[S40 II - S40 II D5](#)

[S40 II - S40 II 1.8 F Flexifuel](#)

[S40 II - S40 2.4](#)

[S40 II - S40 2.5 T5](#)

[S40 II - S40 II 2.4i](#)

[S40 II - S40 II 2.0](#)

[S40 II - S40 II 2.0 F Flexifuel](#)
[S40 II - S40 II D2](#)
[S40 II - S40 II D3](#)
[S40 II - S40 II D4](#)
[S60 I - S60 I 2.3 T5](#)
[S60 I - S60 I 2.4](#)
[S60 I - S60 I 2.4 T](#)
[S60 I - S60 I 2.0 T](#)
[S60 I - S60 I 2.4D](#)
[S60 I - S60 I 2.4 T AWD](#)
[S60 I - S60 I R AWD](#)
[S60 I - S60 I 2.5 T AWD](#)
[S60 I - S60 I 2.5 T](#)
[S60 I - S60 I 2.4 T5](#)
[S60 I - S60 I D5](#)
[S60 I - S60 I D](#)
[S60 I - S60 I 2.4 Bi-Fuel CNG](#)
[S60 I - S60 I 2.4 Bi-Fuel LPG](#)
[S60 II - S60 II 2.0T](#)
[S60 II - S60 II D3](#)
[S60 II - S60 II D5](#)
[S60 II - S60 II D5 AWD](#)
[S60 II - S60 II T6 AWD](#)
[S60 II - S60 II T3](#)
[S60 II - S60 II T4](#)
[S60 II - S60 II T5](#)
[S60 II - S60 II DRIVe](#)
[S60 II - S60 II T4F](#)
[S60 II - S60 II 2.5T5](#)
[S60 II - S60 II D4](#)
[S60 II - S60 II 2.0T4](#)
[S60 II - S60 II 2.0T5](#)
[S70 - S70 2.4](#)
[S70 - S70 2.4 AWD](#)
[S70 - S70 2.0](#)
[S70 - S70 2.5](#)
[S70 - S70 2.5 20V](#)
[S70 - S70 2.3 T-5](#)
[S70 - S70 TDI](#)
[S70 - S70 2.0 T](#)
[S70 - S70 R 2.3 T](#)
[S70 - S70 2.3](#)
[S70 - S70 2.5 T](#)
[S70 - S70 2.5 T AWD](#)
[S70 - S70 2.5 Bifuel](#)
[S70 - S70 2.0 T 20V](#)
[S70 - S70 R 2.3 T AWD](#)
[S70 - S70 2.0 T AWD](#)

[S80 - S80 2.3i T](#)
[S80 I - S80 I 2.0T5](#)
[S80 I - S80 I 2.9](#)
[S80 I - S80 I 2.8 T6](#)
[S80 I - S80 I 2.0T](#)
[S80 I - S80 I 2.5 TDI](#)
[S80 I - S80 I 2.4 Bi-Fuel LPG](#)
[S80 I - S80 I 2.4](#)
[S80 I - S80 I 2.0 T](#)
[S80 I - S80 I D5](#)
[S80 I - S80 I 2.4 T4 Bi-Fuel CNG](#)
[S80 I - S80 I 2.4D](#)
[S80 I - S80 I 3.0](#)
[S80 I - S80 I 3.0 T6](#)
[S80 I - S80 I 2.4T](#)
[S80 I - S80 I 2.5 AWD](#)
[S80 I - S80 I 2.5](#)
[S80 I - S80 I 2.4T AWD](#)
[S80 I - S80 I 2.3R](#)
[S80 II - S80 II D5](#)
[S80 II - S80 II 2.4D](#)
[S80 II - S80 II 2.5T](#)
[S80 II - S80 II 3.2](#)
[S80 II - S80 II 3.2 AWD](#)
[S80 II - S80 II T6 AWD](#)
[S80 II - S80 II D5 AWD](#)
[S80 II - S80 II 2.0B](#)
[S80 II - S80 II 2.0 F Flexifuel](#)
[S80 II - S80 II 2.0D](#)
[S80 II - S80 II 2.5 FT Flexifuel](#)
[S80 II - S80 II 2.5 FT Fexifuel](#)
[S80 II - S80 II T5](#)
[S80 II - S80 II T4](#)
[S80 II - S80 II D3](#)
[S80 II - S80 II 3.0T](#)
[S80 II - S80 II T4F](#)
[S80 II - S80 II D4](#)
[S80 II - S80 II DRIVe](#)
[S80 II - S80 II 1.6D DRIVe](#)
[S80 II - S80 II 2.0T](#)
[S80 II - S80 II V8 AWD](#)
[V40 CROSS COUNTRY - V40 1.6 T4 CROSS COUNTRY](#)
[V40 CROSS COUNTRY - V40 2.0 T5 CROSS COUNTRY](#)
[V40 CROSS COUNTRY - V40 2.0 T5 AWD CROSS COUNTRY](#)
[V40 CROSS COUNTRY - V40 2.5 T5 CROSS COUNTRY](#)
[V40 CROSS COUNTRY - V40 2.5 T5 AWD CROSS COUNTRY](#)
[V40 CROSS COUNTRY - V40 1.6 D2 CROSS COUNTRY](#)
[V40 CROSS COUNTRY - V40 2.0 D3 CROSS COUNTRY](#)

[V40 CROSS COUNTRY - V40 2.0 D4 CROSS COUNTRY](#)

[V40 CROSS COUNTRY - V40 2.0 T4 CROSS COUNTRY](#)

[V40 I - V40 I T4](#)

[V40 I - V40 I 1.8 16V](#)

[V40 I - V40 I 2.0](#)

[V40 I - V40 I 1.6 16V](#)

[V40 I - V40 I 1.9 T4](#)

[V40 I - V40 I 2.0 16V T](#)

[V40 I - V40 I 2.0 T](#)

[V40 I - V40 I 2.0 T4](#)

[V40 I - V40 I 2.0 16V](#)

[V40 II - V40 II T3](#)

[V40 II - V40 II T4](#)

[V40 II - V40 II D2](#)

[V40 II - V40 II D3](#)

[V40 II - V40 II D4](#)

[V40 II - V40 II T5](#)

[V50 - V50 T5](#)

[V50 - V50 2.4](#)

[V50 - V50 2.4i](#)

[V50 - V50 2.0D](#)

[V50 - V50 1.6D DRIVe](#)

[V50 - V50 1.8](#)

[V50 - V50 1.6](#)

[V50 - V50 T5 AWD](#)

[V50 - V50 D5](#)

[V50 - V50 1.8 F Flexifuel](#)

[V50 - V50 2.0](#)

[V50 - V50 2.0 F Flexifuel](#)

[V50 - V50 D2 DRIVe](#)

[V50 - V50 D3](#)

[V50 - V50 D4](#)

[V60 - V60 2.0T](#)

[V60 - V60 T6 AWD](#)

[V60 - V60 D3](#)

[V60 - V60 D5](#)

[V60 - V60 T3](#)

[V60 - V60 T4](#)

[V60 - V60 T5](#)

[V60 - V60 D5 AWD](#)

[V60 - V60 DRIVe](#)

[V60 - V60 T4F](#)

[V60 - V60 D4](#)

[V60 - V60 D5 Hybrid AWD](#)

[V60 - V60 D4 AWD](#)

[V70 - V70 2.3i](#)

[V70 - V70 R 2.3 AWD](#)

[V70 I - V70 I 2.0](#)

[V70 I - V70 I 2.5](#)
[V70 I - V70 I 2.5 20V](#)
[V70 I - V70 I T-5](#)
[V70 I - V70 I 2.5 TDI](#)
[V70 I - V70 I 2.0 Turbo](#)
[V70 I - V70 I 2.5 T AWD](#)
[V70 I - V70 I 2.3R](#)
[V70 I - V70 I 2.3](#)
[V70 I - V70 I 2.5 T](#)
[V70 I - V70 I R 2.3 AWD](#)
[V70 I - V70 I 2.5 T XC AWD](#)
[V70 I - V70 I 2.5 BI-FUEL](#)
[V70 I - V70 I 2.5 AWD](#)
[V70 I - V70 I 2.4](#)
[V70 I - V70 I T-5 AWD](#)
[V70 I - V70 I 2.0 AWD Turbo](#)
[V70 I - V70 I 2.0 T 20V](#)
[V70 I - V70 I 2.5 T XC](#)
[V70 I - V70 I 2.3 AWD](#)
[V70 I - V70 I XC AWD](#)
[V70 I - V70 I 2.5T](#)
[V70 II - V70 II 2.0 T](#)
[V70 II - V70 II 2.4 T](#)
[V70 II - V70 II 2.3 T5](#)
[V70 II - V70 II XC AWD](#)
[V70 II - V70 II 2.4](#)
[V70 II - V70 II 2.5D](#)
[V70 II - V70 II 2.4D](#)
[V70 II - V70 II 2.5 BI-FUEL CNG](#)
[V70 II - V70 II 2.5 BI-FUEL LPG](#)
[V70 II - V70 II 2.5 T AWD](#)
[V70 II - V70 II 2.4D AWD](#)
[V70 II - V70 II R 2.5 T AWD](#)
[V70 II - V70 II 2.5 T](#)
[V70 II - V70 II 2.4 T5](#)
[V70 II - V70 II D5](#)
[V70 II - V70 II D5 AWD](#)
[V70 II - V70 II 2.4 T AWD](#)
[V70 II - V70 II 2.3](#)
[V70 III - V70 III 3.2](#)
[V70 III - V70 III 2.5 T](#)
[V70 III - V70 III T6 AWD](#)
[V70 III - V70 III 2.4D](#)
[V70 III - V70 III D5](#)
[V70 III - V70 III 3.2 AWD](#)
[V70 III - V70 III D5 AWD](#)
[V70 III - V70 III 2.0 F Flexifuel](#)
[V70 III - V70 III 2.0B](#)

[V70 III - V70 III 2.0D](#)
[V70 III - V70 III 2.5 FT Flexifuel](#)
[V70 III - V70 III 1.6D DRIVe](#)
[V70 III - V70 III 2.5 FT Flexifuel](#)
[V70 III - V70 III 2.0 T](#)
[V70 III - V70 III D3](#)
[V70 III - V70 III T5](#)
[V70 III - V70 III T4](#)
[V70 III - V70 III 1.6 D DRIVe](#)
[V70 III - V70 III T4F](#)
[V70 III - V70 III 2.0 D4](#)
[V70 III - V70 III 2.0 T5](#)
[V70 III - V70 III D4 AWD](#)
[XC60 - XC60 D5 AWD](#)
[XC60 - XC60 2.4D AWD](#)
[XC60 - XC60 T6 AWD](#)
[XC60 - XC60 2.4D DRIVe](#)
[XC60 - XC60 3.2 AWD](#)
[XC60 - XC60 3.2](#)
[XC60 - XC60 2.0T](#)
[XC60 - XC60 D3 DRIVe](#)
[XC60 - XC60 T5](#)
[XC60 - XC60 D4 AWD](#)
[XC60 - XC60 D3](#)
[XC60 - XC60 D4](#)
[XC70 I - XC70 I 2.5T AWD](#)
[XC70 I - XC70 I 2.4D AWD](#)
[XC70 I - XC70 I 2.3T AWD](#)
[XC70 I - XC70 I D5 AWD](#)
[XC70 I - XC70 I 2.4T AWD](#)
[XC70 II - XC70 II D5 AWD](#)
[XC70 II - XC70 II 3.2 AWD](#)
[XC70 II - XC70 II 2.4D AWD](#)
[XC70 II - XC70 II T6 AWD](#)
[XC70 II - XC70 II 2.4D DRIVe](#)
[XC70 II - XC70 II D3 DRIVe](#)
[XC70 II - XC70 II 3.2 2WD](#)
[XC70 II - XC70 II D3 AWD](#)
[XC90 - XC90 2.5T AWD](#)
[XC90 - XC90 T6 AWD](#)
[XC90 - XC90 D5 AWD](#)
[XC90 - XC90 2.5T FWD](#)
[XC90 - XC90 V8 AWD](#)
[XC90 - XC90 3.2 AWD](#)
[XC90 - XC90 3.2 FWD](#)
[XC90 - XC90 D3 FWD](#)
[XC90 - XC90 T5 AWD](#)

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
<p>2006/10 -</p>	<p>B4164S3</p>	<p>1.6</p>	<p>100</p>	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch

				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO				C30 - C30 1.8	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration

Anti-block system
ESP Teves Mk60

- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Passenger compartment temperature
 - Engine status
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Kilometer reading
 - Transmission skidding control
 - Brake exertion electrical distribution
 - Steering wheel rotational speed
 - Ambient temperature
 - Brake pedal travel
 - ABS control
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored steering angle sensor offset
 - Vehicle acceleration
 - Brake pressure sensor
 - Stored brake pressure sensor offset
 - ESP control
 - Yaw rate sensor, offset
 - Front left wheel acceleration
 - Front right wheel acceleration
 - Rear left wheel acceleration
 - Rear right wheel acceleration
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
 - Torque reduction request by ASR
 - Central electronics power supply
 - Steering direction

Underbody/Steering
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30
 - Steering wheel rotational speed
 - Engine status
 - Pump motor steering assistance
 - Power steering motor activation current
 - Power steering
 - Power steering motor activation
 - Power steering motor temperature

2006/10 - 2010/07	B4184S11	1.8	125	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button

					<ul style="list-style-type: none"> - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					C30 - C30 2.0	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage 	

Anti-block system
ESP Teves Mk60

- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Underbody/Steering
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30
 - Steering wheel rotational speed
 - Engine status
 - Pump motor steering assistance
 - Power steering motor activation current
 - Power steering
 - Power steering motor activation
 - Power steering motor temperature
 - Speed-dependent power steering
 - Power steering motor specified speed
 - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Basic adjustment, headlights auto adjustment
 - Reset undervoltage counter

2006/10 -	B4204S3	2.0	145	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				<p>Parking assisting system</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

				Park Distance Control 9.12.1	<ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					
C30 - C30 2.4i					
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control

- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading

2006/10 - 2010/07	B5244S4	2.4	170	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Convertor bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Alternator voltage functional test • Adjustments / settings - Start mode

Central electronics
 Central electronics, front, 9.12.1

- Basic adjustment, headlights auto adjustment
- Reset undervoltage counter
- Reset crash detection signal
- Rear wiper with reverse gear
- **Error memory**
- **Current values**
 - Fuel pump relay
 - Power supply
 - Clutch switch
 - brake fluid level
 - Light switch
 - Back-up lights
 - Ignition key position
 - Main beam relay
 - Key code
 - Ignition key
 - Status Ignition lock
 - Windscreen washing water level
 - Front fog lights relay
 - Rear window wiper
 - Front windscreen wiper
 - Rear window froster relay
 - Vehicle power supply status
 - Headlight washer pump relay
 - Orientation light potentiometer
 - Rain sensor
 - Gas pedal position
 - Windshield washer relay
 - Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
 Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door
 - Lock rear left door

- **Identification**
- **Clear errors**

				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					C30 - C30 T5	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle 	

ESP Teves Mk60

- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1

2006/10 - 2007/07	B5254T3	2.5	220	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests

Central electronics
Central electronics, front, 9.12.1

- Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Basic adjustment, headlights auto adjustment
 - Reset undervoltage counter
 - Reset crash detection signal
 - Rear wiper with reverse gear
- **Error memory**
- **Current values**
 - Fuel pump relay
 - Power supply
 - Clutch switch
 - brake fluid level
 - Light switch
 - Back-up lights
 - Ignition key position
 - Main beam relay
 - Key code
 - Ignition key
 - Status Ignition lock
 - Windscreen washing water level
 - Front fog lights relay
 - Rear window wiper
 - Front windscreen wiper
 - Rear window froster relay
 - Vehicle power supply status
 - Headlight washer pump relay
 - Orientation light potentiometer
 - Rain sensor
 - Gas pedal position
 - Windshield washer relay
 - Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door

					- Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control

- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading

2007/08	B5254T7	2.5	230	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Convertor bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Alternator voltage functional test • Adjustments / settings - Start mode

Central electronics
 Central electronics, front, 9.12.1

- Basic adjustment, headlights auto adjustment
- Reset undervoltage counter
- Reset crash detection signal
- Rear wiper with reverse gear
- **Error memory**
- **Current values**
 - Fuel pump relay
 - Power supply
 - Clutch switch
 - brake fluid level
 - Light switch
 - Back-up lights
 - Ignition key position
 - Main beam relay
 - Key code
 - Ignition key
 - Status Ignition lock
 - Windscreen washing water level
 - Front fog lights relay
 - Rear window wiper
 - Front windscreen wiper
 - Rear window froster relay
 - Vehicle power supply status
 - Headlight washer pump relay
 - Orientation light potentiometer
 - Rain sensor
 - Gas pedal position
 - Windshield washer relay
 - Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
 Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door
 - Lock rear left door

- **Identification**

				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO				C30 - C30 1.6D DRIVE	
Year	Engine	Liters	HP	System	Functions
				Anti-block system	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle

2006/10 - 2011/07	D4164T...	1.6	109	ESP Teves Mk60	<ul style="list-style-type: none"> - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights

				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance

VOLVO				C30 - C30 2.0D	
Year	Engine	Liters	HP	System	Functions
					• Identification

Anti-block system
ESP Teves Mk60

- **Clear errors**
- **Functional tests**
 - ABS test
 - ASR test
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Passenger compartment temperature
 - Engine status
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Kilometer reading
 - Transmission skidding control
 - Brake exertion electrical distribution
 - Steering wheel rotational speed
 - Ambient temperature
 - Brake pedal travel
 - ABS control
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored steering angle sensor offset
 - Vehicle acceleration
 - Brake pressure sensor
 - Stored brake pressure sensor offset
 - ESP control
 - Yaw rate sensor, offset
 - Front left wheel acceleration
 - Front right wheel acceleration
 - Rear left wheel acceleration
 - Rear right wheel acceleration
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
 - Torque reduction request by ASR
 - Central electronics power supply
 - Steering direction

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30

2006/10 - 2010/09	D4204T	2.0	136	Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				Immobilizer	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch

			Access system/immobilizer 2.0	<ul style="list-style-type: none"> - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed

Anti-block system
ESP Teves Mk60

- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Underbody/Steering
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30
 - Steering wheel rotational speed
 - Engine status
 - Pump motor steering assistance
 - Power steering motor activation current
 - Power steering
 - Power steering motor activation
 - Power steering motor temperature
 - Speed-dependent power steering
 - Power steering motor specified speed
 - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Basic adjustment, headlights auto adjustment

2006/10 - 2007/07	D4204T2	2.0	131	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
					<ul style="list-style-type: none"> • Identification • Clear errors

				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					
C30 - C30 D5					
Year	Engine	Liters	HP	System	Functions
				Anti-block system	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle

ESP Teves Mk60

- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1

2006/10 - 2010/07	D5244T9	2.4	163	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests

Central electronics
Central electronics, front, 9.12.1

- Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Basic adjustment, headlights auto adjustment
 - Reset undervoltage counter
 - Reset crash detection signal
 - Rear wiper with reverse gear
- **Error memory**
- **Current values**
 - Fuel pump relay
 - Power supply
 - Clutch switch
 - brake fluid level
 - Light switch
 - Back-up lights
 - Ignition key position
 - Main beam relay
 - Key code
 - Ignition key
 - Status Ignition lock
 - Windscreen washing water level
 - Front fog lights relay
 - Rear window wiper
 - Front windscreen wiper
 - Rear window froster relay
 - Vehicle power supply status
 - Headlight washer pump relay
 - Orientation light potentiometer
 - Rain sensor
 - Gas pedal position
 - Windshield washer relay
 - Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door
 - Lock rear left door

				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					C30 - C30 1.8 F Flexifuel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor 	

2006/10 - 2010/07	B4184S8	1.8	125	<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level

Central electronics
Central electronics, front, 9.12.1

- Light switch
- Back-up lights
- Ignition key position
- Main beam relay
- Key code
- Ignition key
- Status Ignition lock
- Windscreen washing water level
- Front fog lights relay
- Rear window wiper
- Front windscreen wiper
- Rear window froster relay
- Vehicle power supply status
- Headlight washer pump relay
- Orientation light potentiometer
- Rain sensor
- Gas pedal position
- Windshield washer relay
- Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door
 - Lock rear left door

Parking assisting system
Park Distance Control 9.12.1

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Calculated distance at rear
 - Calculated front distance

- **Identification**
- **Adjustments / settings**
 - Battery replacement

				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO				C30 - C30 2.0 F Flexifuel	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset

					<ul style="list-style-type: none"> - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
2009/08	B4204S4	2.0	146	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay

			<ul style="list-style-type: none"> - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
		<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
		<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
		<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA

					<ul style="list-style-type: none"> - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO				C30 - C30 Electric	
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration

2011/08 -	E400V1	0.0	112		<ul style="list-style-type: none"> - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights

- Rear window washer system

VOLVO				C30 - C30 D2 DRIVe	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status

2010/08 -	D4162T	1.6	114	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators

					<ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					C30 - C30 D3	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed 	

					<ul style="list-style-type: none"> - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
2010/08 -	D5204T5	2.0	150	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay

				<ul style="list-style-type: none"> - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status

					<ul style="list-style-type: none"> - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO	C30 - C30 D4
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed

2010/08	D5204T	2.0	177	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left

				<ul style="list-style-type: none"> - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					C70 Coupe - C70 2.3 T5 Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply 	

1997/09 - 2002/07	B5234T3	2.3	240	Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
				Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
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VOLVO					C70 Coupe - C70 2.4 20V Coupe	
Year	Engine	Liters	HP	System	Functions	
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value 	

<p>1999/03 - 2000/07</p>	<p>B5244S</p>	<p>2.4</p>	<p>165</p>	<p></p>	<ul style="list-style-type: none"> - Gear ratio set value - Brake CU signal, vehicle speed • Actuators - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
				<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

Year	Engine	Liters	HP	System	Functions
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
1999/08 - 2002/07	B 5204 T4	2.0	163		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature

				<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
1997/01 - 1998/07	B5204T2	2.0	180	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch

					<ul style="list-style-type: none"> - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
1997/01 - 2000/07	B 5204 T3	2.0	225	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4

- Current level LED circuit A
- Current level LED circuit B

VOLVO				C70 Coupe - C70 2.4 T Coupe	
Year	Engine	Liters	HP	System	Functions
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
1999/08 - 2002/07	B5244T	2.4	193		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position

				<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					C70 Coupe - C70 2.5 LPT Coupe	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch 	

1998/01 - 1999/07	B5254T	2.4	193	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					
C70 Coupe - C70 2.5 20V Coupe					
Year	Engine	Liters	HP	System	Functions
1999/03 - 2000/07	B5254S	2.4	170	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch

					<ul style="list-style-type: none"> - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO	C70 I Cabrio - C70 I 2.3 T5 Cabrio
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Year	Engine	Liters	HP	System	Functions
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4

1998/08 - 2002/07	B5234T3	2.3	240	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> - Solenoid valve: direct gear direct gear - Solenoid switch valve 5 <ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode

				<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
1998/02 - 2002/07	B5234T3	2.3	240	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1

				<ul style="list-style-type: none"> - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5

					<ul style="list-style-type: none"> - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
<p>2002/08 - 2006/03</p>	<p>B5234T9</p>	<p>2.3</p>	<p>245</p>	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights

				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					C70 Cabrio - C70 2.4 Cabrio	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch 	

1999/03 - 2000/07	B5244S	2.4	140 - 170	Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
				Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators - Gear shift solenoid valve 1 - Gear shift solenoid valve 2

					<ul style="list-style-type: none"> - Modulation pressure, solenoid - Switch solenoid valve SLU
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					C70 I Cabrio - C70 I 2.4 T Cabrio	
Year	Engine	Liters	HP	System	Functions	
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque 	

1999/08 - 2002/07	B5244T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4

					<ul style="list-style-type: none"> - Current level LED circuit A - Current level LED circuit B
1998/08 - 1999/07	B5254T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					C70 I Cabrio - C70 I 2.0 T Cabrio	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings 	

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

Gear box control
5-gears automatic transmission EGS 50-42
CAN

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - kick-down switch
 - Engine revolution
 - Winter switch
 - Oil temperature sensor gear box
 - Engine status
 - Gear selection position
 - gear box oil temperature

<p>1999/08 - 2006/03</p>	<p>B5204T4</p>	<p>2.0</p>	<p>163</p>		<ul style="list-style-type: none"> - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
<p>Central electronics Central electronics, front, 9.12.1</p>					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
1998/03 - 1998/07	B5204T2	2.0	180	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch

1998/08 - 2000/07	B5204T3	2.0	226		<ul style="list-style-type: none"> - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					C70 I Cabrio - C70 I 2.4 T5 Cabrio	
Year	Engine	Liters	HP	System	Functions	
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation <p>• Special functions</p> <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 	

					<ul style="list-style-type: none"> - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
<p>2002/08 - 2006/03</p>	<p>B5244T7</p>	<p>2.4</p>	<p>200</p>	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter

				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					C70 II - C70 II 2.4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration 	

Anti-block system
ESP Teves Mk60

- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Passenger compartment temperature
 - Engine status
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Kilometer reading
 - Transmission skidding control
 - Brake exertion electrical distribution
 - Steering wheel rotational speed
 - Ambient temperature
 - Brake pedal travel
 - ABS control
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored steering angle sensor offset
 - Vehicle acceleration
 - Brake pressure sensor
 - Stored brake pressure sensor offset
 - ESP control
 - Yaw rate sensor, offset
 - Front left wheel acceleration
 - Front right wheel acceleration
 - Rear left wheel acceleration
 - Rear right wheel acceleration
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
 - Torque reduction request by ASR
 - Central electronics power supply
 - Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage

2006/03 - 2010/07	B5244S5	2.4	140	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> - Driving speed - Gear lever AT position - kick-down switch - Solenoid valve 1/2 - Engine revolution - Solenoid valve 3 - stop lights switch - Winter switch - Passenger compartment temperature - Control unit power supply - Inserted gear - system power supply - Engine status - gear box oil temperature - transmission ratio - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Convertor bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
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			<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
			<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply

				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button <p>• Actuators</p> <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					C70 II - C70 II 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test 	

Anti-block system
ESP Teves Mk60

- ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Passenger compartment temperature
 - Engine status
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Kilometer reading
 - Transmission skidding control
 - Brake exertion electrical distribution
 - Steering wheel rotational speed
 - Ambient temperature
 - Brake pedal travel
 - ABS control
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored steering angle sensor offset
 - Vehicle acceleration
 - Brake pressure sensor
 - Stored brake pressure sensor offset
 - ESP control
 - Yaw rate sensor, offset
 - Front left wheel acceleration
 - Front right wheel acceleration
 - Rear left wheel acceleration
 - Rear right wheel acceleration
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
 - Torque reduction request by ASR
 - Central electronics power supply
 - Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**

2006/03
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2010/07

B5244S4

2.4

170

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1

				<ul style="list-style-type: none"> - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options

				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO				C70 II - C70 II T5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors

Anti-block system
ESP Teves Mk60

• **Functional tests**

- ABS test
- ASR test
- ESP test

• **Adjustments / settings**

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment

• **Longitudinal acceleration sensor zero position adaptation**

- Adaptation, steering wheel angle sensor

• **Special functions**

- Bleed

• **Error memory**

• **Current values**

- Longitudinal acceleration sensor
- Vehicle driving speed
- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

2006/03
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2007/07

B5254T3

2.5

220

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value
 - Gear ratio set value
 - Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3

				<ul style="list-style-type: none"> - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<ul style="list-style-type: none"> • Identification • Clear errors

				<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Immobilizer Access system/immobilizer 2.0</p>	
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test

Anti-block system
ESP Teves Mk60

• **Adjustments / settings**

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation

• **Special functions**

- Bleed

• **Error memory**

• **Current values**

- Longitudinal acceleration sensor
- Vehicle driving speed
- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position

2007/08 -	B5254T7	2.5	230	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Driving speed - Gear lever AT position - kick-down switch - Solenoid valve 1/2 - Engine revolution - Solenoid valve 3 - stop lights switch - Winter switch - Passenger compartment temperature - Control unit power supply - Inserted gear - system power supply - Engine status - gear box oil temperature - transmission ratio - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2
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		<ul style="list-style-type: none"> - Solenoid switch valve 5
	<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values

				<p>Immobilizer Access system/immobilizer 2.0</p> <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button <p>• Actuators</p> <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO				C70 II - C70 II D5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test

Anti-block system
ESP Teves Mk60

- ASR test
- ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Passenger compartment temperature
 - Engine status
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Kilometer reading
 - Transmission skidding control
 - Brake exertion electrical distribution
 - Steering wheel rotational speed
 - Ambient temperature
 - Brake pedal travel
 - ABS control
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored steering angle sensor offset
 - Vehicle acceleration
 - Brake pressure sensor
 - Stored brake pressure sensor offset
 - ESP control
 - Yaw rate sensor, offset
 - Front left wheel acceleration
 - Front right wheel acceleration
 - Rear left wheel acceleration
 - Rear right wheel acceleration
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
 - Torque reduction request by ASR
 - Central electronics power supply
 - Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**

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2010/07

D5244T8...

2.4

180

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual

pressure

- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear

				<ul style="list-style-type: none"> - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO				C70 II - C70 II 2.4D	
Year	Engine	Liters	HP	System	Functions
					• Identification

Anti-block system
ESP Teves Mk60

- **Clear errors**
- **Functional tests**
 - ABS test
 - ASR test
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Passenger compartment temperature
 - Engine status
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Kilometer reading
 - Transmission skidding control
 - Brake exertion electrical distribution
 - Steering wheel rotational speed
 - Ambient temperature
 - Brake pedal travel
 - ABS control
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored steering angle sensor offset
 - Vehicle acceleration
 - Brake pressure sensor
 - Stored brake pressure sensor offset
 - ESP control
 - Yaw rate sensor, offset
 - Front left wheel acceleration
 - Front right wheel acceleration
 - Rear left wheel acceleration
 - Rear right wheel acceleration
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
 - Torque reduction request by ASR
 - Central electronics power supply
 - Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**

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Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Start gear indicator mode
- Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value
 - Gear ratio set value
 - Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2

	<ul style="list-style-type: none"> - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system

			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed

2008/01 - 2010/07	D4204T	2.0	136	Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA

					<ul style="list-style-type: none"> - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO					C70 II - C70 II D3	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset 	
				Underbody/Steering	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage 	

2010/10 -	D5204T5	2.0	150	Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch

				<ul style="list-style-type: none"> - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					C70 II - C70 II D4	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed 	

ESP Teves Mk60 UDS

- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- ESP switch
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Power supply voltages
- Calculated front left brake temperature
- Calculated front right brake temperature
- Calculated rear left brake temperature
- Calculated rear right brake temperature
- Stored brake pressure sensor offset
- Steering angle offset

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current

2010/10 -	D5204T	2.0	177		<ul style="list-style-type: none"> - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system

			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value
 - Gear ratio set value
 - Start release by selector lever module

- 2010/07	B5244S4	2.4	170		<ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system

				<ul style="list-style-type: none"> - Relay for high-beam headlights - Rear window washer system
			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value

2003/12 - 2007/07	B5254T3	2.5	220	<ul style="list-style-type: none"> - Gear ratio set value - Start release by selector lever module • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay

		<ul style="list-style-type: none"> - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

			<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration

2007/08
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B5254T7

2.5

230

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value
 - Gear ratio set value
 - Start release by selector lever module
- **Actuators**

		<ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
	<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights

					<ul style="list-style-type: none"> - Rear window washer system • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				<p>Immobilizer Access system/immobilizer 2.0</p>	
				<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					S40 II - S40 II 2.0D	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test 	

Anti-block system
ESP Teves Mk60

- ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Passenger compartment temperature
 - Engine status
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Kilometer reading
 - Transmission skidding control
 - Brake exertion electrical distribution
 - Steering wheel rotational speed
 - Ambient temperature
 - Brake pedal travel
 - ABS control
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored steering angle sensor offset
 - Vehicle acceleration
 - Brake pressure sensor
 - Stored brake pressure sensor offset
 - ESP control
 - Yaw rate sensor, offset
 - Front left wheel acceleration
 - Front right wheel acceleration
 - Rear left wheel acceleration
 - Rear right wheel acceleration
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
 - Torque reduction request by ASR
 - Central electronics power supply
 - Steering direction

Underbody/Steering
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30
 - Steering wheel rotational speed
 - Engine status
 - Pump motor steering assistance
 - Power steering motor activation current

2004/01 - 2010/07	D4204T	2.0	136	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left

				<ul style="list-style-type: none"> - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed

Anti-block system
ESP Teves Mk60

- rare right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Underbody/Steering
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30
 - Steering wheel rotational speed
 - Engine status
 - Pump motor steering assistance
 - Power steering motor activation current
 - Power steering
 - Power steering motor activation
 - Power steering motor temperature
 - Speed-dependent power steering
 - Power steering motor specified speed
 - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Basic adjustment, headlights auto adjustment
 - Reset undervoltage counter
 - Reset crash detection signal
 - Rear wiper with reverse gear
- **Error memory**

2004/04 - 2007/07	D4204T2	2.0	131	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear

					- Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					S40 II - S40 II 1.6D DRIVE	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution 	

					<ul style="list-style-type: none"> - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
2004/11 -	D4164T...	1.6	109 - 110	<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key

					<ul style="list-style-type: none"> - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
			Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door 	
			Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance 	

VOLVO					S40 II - S40 II 1.8	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test 	

Anti-block system
ESP Teves Mk60

- ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Passenger compartment temperature
 - Engine status
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Kilometer reading
 - Transmission skidding control
 - Brake exertion electrical distribution
 - Steering wheel rotational speed
 - Ambient temperature
 - Brake pedal travel
 - ABS control
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored steering angle sensor offset
 - Vehicle acceleration
 - Brake pressure sensor
 - Stored brake pressure sensor offset
 - ESP control
 - Yaw rate sensor, offset
 - Front left wheel acceleration
 - Front right wheel acceleration
 - Rear left wheel acceleration
 - Rear right wheel acceleration
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
 - Torque reduction request by ASR
 - Central electronics power supply
 - Steering direction

Underbody/Steering
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30
 - Steering wheel rotational speed
 - Engine status
 - Pump motor steering assistance
 - Power steering motor activation current

2004/04 - 2010/07	B4184S11	1.8	125		<ul style="list-style-type: none"> - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left

					<ul style="list-style-type: none"> - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					S40 II - S40 II 1.6	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor 	

Anti-block system
ESP Teves Mk60

- Vehicle driving speed
- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Underbody/Steering
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30
 - Steering wheel rotational speed
 - Engine status
 - Pump motor steering assistance
 - Power steering motor activation current
 - Power steering
 - Power steering motor activation
 - Power steering motor temperature
 - Speed-dependent power steering
 - Power steering motor specified speed
 - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode

2004/11	B4164S3	1.6	101	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
					<ul style="list-style-type: none"> • Identification

				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO S40 II - S40 II 2.5 T5 AWD					
Year	Engine	Liters	HP	System	Functions
				Anti-block system	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle

ESP Teves Mk60

- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1

2004/04 - 2007/07	B5254T3	2.5	220	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests

Central electronics
Central electronics, front, 9.12.1

- Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Basic adjustment, headlights auto adjustment
 - Reset undervoltage counter
 - Reset crash detection signal
 - Rear wiper with reverse gear
- **Error memory**
- **Current values**
 - Fuel pump relay
 - Power supply
 - Clutch switch
 - brake fluid level
 - Light switch
 - Back-up lights
 - Ignition key position
 - Main beam relay
 - Key code
 - Ignition key
 - Status Ignition lock
 - Windscreen washing water level
 - Front fog lights relay
 - Rear window wiper
 - Front windscreen wiper
 - Rear window froster relay
 - Vehicle power supply status
 - Headlight washer pump relay
 - Orientation light potentiometer
 - Rain sensor
 - Gas pedal position
 - Windshield washer relay
 - Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door

				<ul style="list-style-type: none"> - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
			<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control

- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading

Gear box control

2007/08 - 2010/07	B5254T7	2.5	230	5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Convertor bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Alternator voltage functional test • Adjustments / settings - Start mode - Basic adjustment, headlights auto adjustment

Central electronics
Central electronics, front, 9.12.1

- Reset undervoltage counter
- Reset crash detection signal
- Rear wiper with reverse gear
- **Error memory**
- **Current values**
 - Fuel pump relay
 - Power supply
 - Clutch switch
 - brake fluid level
 - Light switch
 - Back-up lights
 - Ignition key position
 - Main beam relay
 - Key code
 - Ignition key
 - Status Ignition lock
 - Windscreen washing water level
 - Front fog lights relay
 - Rear window wiper
 - Front windscreen wiper
 - Rear window froster relay
 - Vehicle power supply status
 - Headlight washer pump relay
 - Orientation light potentiometer
 - Rain sensor
 - Gas pedal position
 - Windshield washer relay
 - Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door
 - Lock rear left door

- **Identification**
- **Adjustments / settings**

				<p>Electrical energy management Battery management 2.0</p> <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO					S40 II - S40 II D5	
Year	Engine	Liters	HP	System	Functions	
				<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control 	

- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Gear box control
5-gears automatic transmission 55-50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed

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2.4

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Underbody/Steering
Electro-hydraulic power steering 2.0

- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Vehicle driving speed
- Battery voltage
- control unit temperature
- Power supply terminal 30
- Steering wheel rotational speed
- Engine status
- Pump motor steering assistance
- Power steering motor activation current
- Power steering
- Power steering motor activation
- Power steering motor temperature
- Speed-dependent power steering
- Power steering motor specified speed
- Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Basic adjustment, headlights auto adjustment
- Reset undervoltage counter
- Reset crash detection signal
- Rear wiper with reverse gear
- **Error memory**

Central electronics
Central electronics, front, 9.12.1

- **Current values**
 - Fuel pump relay
 - Power supply
 - Clutch switch
 - brake fluid level
 - Light switch
 - Back-up lights
 - Ignition key position
 - Main beam relay
 - Key code
 - Ignition key
 - Status Ignition lock
 - Windscreen washing water level
 - Front fog lights relay
 - Rear window wiper
 - Front windscreen wiper
 - Rear window froster relay
 - Vehicle power supply status
 - Headlight washer pump relay
 - Orientation light potentiometer
 - Rain sensor
 - Gas pedal position
 - Windshield washer relay
 - Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door
 - Lock rear left door

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
 - Reset no-load current information
- **Current values**

			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
			<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control

		<ul style="list-style-type: none"> - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
	<p>Gear box control 5-gears automatic transmission 55-50/51 SN2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - Gear lever AT position - kick-down switch - Solenoid valve 1/2 - Engine revolution - Solenoid valve 3 - stop lights switch - Winter switch - Passenger compartment temperature - Control unit power supply - Inserted gear - system power supply - Engine status - gear box oil temperature - transmission ratio - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C

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2.4

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Underbody/Steering
Electro-hydraulic power steering 2.0

Central electronics

- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30
 - Steering wheel rotational speed
 - Engine status
 - Pump motor steering assistance
 - Power steering motor activation current
 - Power steering
 - Power steering motor activation
 - Power steering motor temperature
 - Speed-dependent power steering
 - Power steering motor specified speed
 - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Basic adjustment, headlights auto adjustment
 - Reset undervoltage counter
 - Reset crash detection signal
 - Rear wiper with reverse gear
- **Error memory**
- **Current values**
 - Fuel pump relay
 - Power supply
 - Clutch switch
 - brake fluid level
 - Light switch
 - Back-up lights
 - Ignition key position
 - Main beam relay
 - Key code

Central electronics, front, 9.12.1

- Ignition key
- Status Ignition lock
- Windscreen washing water level
- Front fog lights relay
- Rear window wiper
- Front windscreen wiper
- Rear window froster relay
- Vehicle power supply status
- Headlight washer pump relay
- Orientation light potentiometer
- Rain sensor
- Gas pedal position
- Windshield washer relay
- Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door
 - Lock rear left door

Electrical energy management
Battery management 2.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
 - Reset no-load current information
- **Current values**
 - Battery voltage
 - Battery charging status
 - Communication with battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA

					<ul style="list-style-type: none"> - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO					S40 II - S40 II 1.8 F Flexifuel	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration 	

					<ul style="list-style-type: none"> - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
2006/04 - 2010/07	B4184S8	1.8	125	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system

			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Convertor bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value
 - Gear ratio set value
 - Start release by selector lever module

-	B 5244 S4	2.4	170		<ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system

				<ul style="list-style-type: none"> - Relay for high-beam headlights - Rear window washer system
			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value

2003/12 -	B 5254 T3	2.5	220		<ul style="list-style-type: none"> - Gear ratio set value - Start release by selector lever module • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay

		<ul style="list-style-type: none"> - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
					<ul style="list-style-type: none"> • Identification

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -

<p>2005/08 - 2010/07</p>	<p>B5244S7</p>	<p>2.4</p>	<p>170</p>		<ul style="list-style-type: none"> - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay

		<ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value

- Battery temperature
- Battery charging current

VOLVO				S40 II - S40 II 2.0	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction

2006/10 -	B4204S3	2.0	145	<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values

				<ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button <p>• Actuators</p> <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Immobilizer Access system/immobilizer 2.0</p>	<p>Electrical energy management Battery management 2.0</p> <ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					S40 II - S40 II 2.0 F Flexifuel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation 	

Anti-block system
ESP Teves Mk60

- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Passenger compartment temperature
 - Engine status
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Kilometer reading
 - Transmission skidding control
 - Brake exertion electrical distribution
 - Steering wheel rotational speed
 - Ambient temperature
 - Brake pedal travel
 - ABS control
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored steering angle sensor offset
 - Vehicle acceleration
 - Brake pressure sensor
 - Stored brake pressure sensor offset
 - ESP control
 - Yaw rate sensor, offset
 - Front left wheel acceleration
 - Front right wheel acceleration
 - Rear left wheel acceleration
 - Rear right wheel acceleration
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
 - Torque reduction request by ASR
 - Central electronics power supply
 - Steering direction

Underbody/Steering
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30
 - Steering wheel rotational speed
 - Engine status
 - Pump motor steering assistance
 - Power steering motor activation current
 - Power steering
 - Power steering motor activation
 - Power steering motor temperature
 - Speed-dependent power steering
 - Power steering motor specified speed
 - Power steering motor actual speed

2009/08 -	B4204S4	2.0	146	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door

					<ul style="list-style-type: none"> - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					S40 II - S40 II D2	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature 	

					<ul style="list-style-type: none"> - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
2011/08	D4162T	1.6	114	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer

		<ul style="list-style-type: none"> - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status

					<ul style="list-style-type: none"> - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO S40 II - S40 II D3

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed

2010/08 -	D5204T5	2.0	150		<ul style="list-style-type: none"> - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left

					<ul style="list-style-type: none"> - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					S40 II - S40 II D4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage 	

				<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
<p>2010/08 -</p>	<p>D5204T</p>	<p>2.0</p>	<p>177</p>	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level

				<ul style="list-style-type: none"> - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
		<p>Immobilizer Access system/immobilizer 2.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
		<p>Parking assisting system Park Distance Control 9.12.1</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA

			Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO					S60 I - S60 I 2.3 T5	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light 	

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position

- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay

<p>2000/11 - 2004/03</p>	<p>B5234T3</p>	<p>2.3</p>	<p>200 - 265</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status - Rear right door status - Hatchback status - Front left door locking - Front right door locking - Rear left door locking - Rear right door locking - Airbag triggering signal - Alarm LED - Xenon lamp status - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15
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• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper

Central electronics
Central electronics 1.0

- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal

	<ul style="list-style-type: none"> - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<ul style="list-style-type: none"> • Identification

				<p>Underbody/Steering Adap. suspension sys. 2.0</p> <ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
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VOLVO					S60 I - S60 I 2.4	
Year	Engine	Liters	HP	System	Functions	
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal 	

				<ul style="list-style-type: none"> - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
		<p>Anti-block system ABS Teves Mk25 VER2</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature

Gear box control
 5-gears automatic transmission 55-50/51SN2.0

- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system

Central electronics
Front central electronics 9.12.2

- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor
 - Ignition key
 - Windscreen washing water level
 - Emergency lights switch
 - Front fog lights relay
 - Lights cleaning

2000/11 - 2009/07	B5244S2	2.4	140	<ul style="list-style-type: none"> - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				<ul style="list-style-type: none"> • Identification

- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal

Central electronics
Central electronics 1.0

- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating

		<ul style="list-style-type: none"> - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation

				<ul style="list-style-type: none"> - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp

		<ul style="list-style-type: none"> - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution

Gear box control
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- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4

Gear box control
5-gears automatic transmission 55-
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- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed

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- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status

- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment

- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys

- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed

		<ul style="list-style-type: none"> - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators

					<ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					S60 I - S60 I 2.4 T	
Year	Engine	Liters	HP	System	Functions	
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp 	

		<ul style="list-style-type: none"> - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution

Gear box control
5-gears automatic transmission 55-50/51SN1.0

- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper

2003/07

Central electronics
Central electronics 1.0

- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal

- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

Steering wheel rotation angle sensor
Steering angle sensor 1.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage
- Driving wheels angle
- Steering angle sensor signal voltage A1
- Steering angle sensor signal voltage A2
- Status of LED circuit A
- Status of LED circuit B
- Status, steering angle sensor signal A1
- Status, steering angle sensor signal A2
- Status, steering angle sensor signal A3
- Status, steering angle sensor signal A4
- Status, steering angle sensor signal B1
- Status, steering angle sensor signal B2
- Status, steering angle sensor signal B3
- Status, steering angle sensor signal B4
- Current level LED circuit A
- Current level LED circuit B

			<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators

		<ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**

<p>2003/08 - 2006/07</p>	<p>B5244T4</p>	<p>2.4</p>	<p>180 - 220</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> • Current values - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status - Rear right door status - Hatchback status - Front left door locking - Front right door locking - Rear left door locking - Rear right door locking - Airbag triggering signal - Alarm LED - Xenon lamp status - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer
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- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status

Central electronics
Central electronics 1.0

- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open
 - rear left el. window lifter closed

		<ul style="list-style-type: none"> - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch

					<ul style="list-style-type: none"> - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					S60 I - S60 I 2.0 T	
Year	Engine	Liters	HP	System	Functions	
				<p>Instrument cluster Instrument cluster 1.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators

		<ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2

Gear box control
5-gears automatic transmission 55-
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- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2

Gear box control
5-gears automatic transmission 55-50/51SN2.0

- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**

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• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer

- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status

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- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open
 - rear left el. window lifter closed

		<ul style="list-style-type: none"> - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch

					<ul style="list-style-type: none"> - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					S60 I - S60 I 2.4D	
Year	Engine	Liters	HP	System	Functions	
				<p>Instrument cluster Instrument cluster 1.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators

		<ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2

Gear box control
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- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**

<p>2001/08 - 2006/07</p>	<p>D5244T</p>	<p>2.4</p>	<p>163</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> • Current values - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status - Rear right door status - Hatchback status - Front left door locking - Front right door locking - Rear left door locking - Rear right door locking - Airbag triggering signal - Alarm LED - Xenon lamp status - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer
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- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status

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- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open
 - rear left el. window lifter closed

		<ul style="list-style-type: none"> - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch

				<ul style="list-style-type: none"> - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light

				<ul style="list-style-type: none"> - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
		<p>Anti-block system ABS Teves Mk25 VER2</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50

2001/12 - 2006/07	D5244T2	2.4	130	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status - Rear right door status - Hatchback status - Front left door locking - Front right door locking - Rear left door locking - Rear right door locking - Airbag triggering signal - Alarm LED - Xenon lamp status - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor
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- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle

Central electronics
Central electronics 1.0

- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor
 - Ignition key
 - Windscreen washing water level

- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light

					<ul style="list-style-type: none"> - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Steering wheel rotation angle sensor Steering angle sensor 2.1		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1

			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> - Rear right damper valve 1 • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light

				<ul style="list-style-type: none"> - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASP/ESP control light
		<p>Anti-block system ABS Teves Mk25 VER2</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking

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Central electronics
Front central electronics 9.12.2

- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch

		<ul style="list-style-type: none"> - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset

				<p>Underbody/Steering Adap. suspension sys. 2.0</p> <ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights

Instrument cluster
Instrument cluster 1.0

- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left

Gear box control
 5-gears automatic transmission 55-
 50/51SN1.0

- Pump motor
- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking

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2.4

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Central electronics
Front central electronics 9.12.2

- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock

- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay

Central electronics
Central electronics 1.0

- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right

		<ul style="list-style-type: none"> - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left

				<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				S60 I - S60 I 2.4 T AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading

Instrument cluster
Instrument cluster 1.0

- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment

Central electronics
Front central electronics 9.12.2

- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor
 - Ignition key
 - Windscreen washing water level
 - Emergency lights switch
 - Front fog lights relay
 - Lights cleaning
 - Fog light switch

<p>2001/11 - 2003/07</p>	<p>B5244T3</p>	<p>2.4</p>	<p>200</p>	<ul style="list-style-type: none"> - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light <p>• Identification • Clear errors</p>
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- **Functional tests**

- Alternator voltage functional test

- **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED

Central electronics
Central electronics 1.0

- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper

				<ul style="list-style-type: none"> - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
				<ul style="list-style-type: none"> • Identification

Instrument cluster
Instrument cluster 1.0

- **Clear errors**
- **Adjustments / settings**
 - Read configuration
 - Option display configuration
 - Service interval adaptation
 - Service interval display reset
 - Activate/deactivate belt warning
 - Parking brake warning tone
- **Error memory**
- **Current values**
 - Failure lamp
 - Engine revolution
 - Warning lights
 - Kilometer reading
 - Fuel level in the tank
 - Rear fog light
 - Cooling agent temperature motor
 - Airbag signal lamp
 - Cruise control, control light
 - Oil pressure control lamp
 - Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal

		<ul style="list-style-type: none"> - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
		<ul style="list-style-type: none"> • Identification

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -

- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window

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2006/07

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2.4

220

Central electronics
Front central electronics 9.12.2

- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left

- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder

Central electronics
Central electronics 1.0

- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status

			<ul style="list-style-type: none"> - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light 	
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
		<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle

					<ul style="list-style-type: none"> - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				S60 I - S60 I R AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification

Instrument cluster
Instrument cluster 1.0

- **Clear errors**
- **Adjustments / settings**
 - Read configuration
 - Option display configuration
 - Service interval adaptation
 - Service interval display reset
 - Activate/deactivate belt warning
 - Parking brake warning tone
- **Error memory**
- **Current values**
 - Failure lamp
 - Engine revolution
 - Warning lights
 - Kilometer reading
 - Fuel level in the tank
 - Rear fog light
 - Cooling agent temperature motor
 - Airbag signal lamp
 - Cruise control, control light
 - Oil pressure control lamp
 - Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal

Gear box control
 5-gears automatic transmission 55-
 50/51SN1.0

- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -

- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window

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B5254T4

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300

Central electronics
Front central electronics 9.12.2

- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left

- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder

Central electronics
Central electronics 1.0

- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status

		<ul style="list-style-type: none"> - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle

					<ul style="list-style-type: none"> - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				S60 I - S60 I 2.5 T AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors

Instrument cluster
Instrument cluster 1.0

- **Adjustments / settings**
 - Read configuration
 - Option display configuration
 - Service interval adaptation
 - Service interval display reset
 - Activate/deactivate belt warning
 - Parking brake warning tone
- **Error memory**
- **Current values**
 - Failure lamp
 - Engine revolution
 - Warning lights
 - Kilometer reading
 - Fuel level in the tank
 - Rear fog light
 - Cooling agent temperature motor
 - Airbag signal lamp
 - Cruise control, control light
 - Oil pressure control lamp
 - Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature

		<ul style="list-style-type: none"> - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

- **Special functions**

- Start gear indicator mode
- Start test mode

- **Error memory**

- **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode

- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay

<p>2004/04 - 2009/07</p>	<p>B5254T2</p>	<p>2.5</p>	<p>209 - 210</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status - Rear right door status - Hatchback status - Front left door locking - Front right door locking - Rear left door locking - Rear right door locking - Airbag triggering signal - Alarm LED - Xenon lamp status - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right
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- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn

Central electronics
Central electronics 1.0

- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status

		<ul style="list-style-type: none"> - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed

					<ul style="list-style-type: none"> - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				S60 I - S60 I 2.5 T	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors

Instrument cluster
Instrument cluster 1.0

- **Adjustments / settings**
 - Read configuration
 - Option display configuration
 - Service interval adaptation
 - Service interval display reset
 - Activate/deactivate belt warning
 - Parking brake warning tone
- **Error memory**
- **Current values**
 - Failure lamp
 - Engine revolution
 - Warning lights
 - Kilometer reading
 - Fuel level in the tank
 - Rear fog light
 - Cooling agent temperature motor
 - Airbag signal lamp
 - Cruise control, control light
 - Oil pressure control lamp
 - Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature

		<ul style="list-style-type: none"> - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

- **Special functions**

- Start gear indicator mode
- Start test mode

- **Error memory**

- **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode

- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay

2004/04 - 2009/07	B5254T2	2.5	209 - 210	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status - Rear right door status - Hatchback status - Front left door locking - Front right door locking - Rear left door locking - Rear right door locking - Airbag triggering signal - Alarm LED - Xenon lamp status - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right
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- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn

Central electronics
Central electronics 1.0

- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status

		<ul style="list-style-type: none"> - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed

					<ul style="list-style-type: none"> - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					S60 I - S60 I 2.4 T5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors 	

Instrument cluster
Instrument cluster 1.0

- **Adjustments / settings**
 - Read configuration
 - Option display configuration
 - Service interval adaptation
 - Service interval display reset
 - Activate/deactivate belt warning
 - Parking brake warning tone
- **Error memory**
- **Current values**
 - Failure lamp
 - Engine revolution
 - Warning lights
 - Kilometer reading
 - Fuel level in the tank
 - Rear fog light
 - Cooling agent temperature motor
 - Airbag signal lamp
 - Cruise control, control light
 - Oil pressure control lamp
 - Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature

		<ul style="list-style-type: none"> - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

- **Special functions**

- Start gear indicator mode
- Start test mode

- **Error memory**

- **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode

- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay

<p>2004/04 - 2009/07</p>	<p>B5244T5</p>	<p>2.4</p>	<p>260</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status - Rear right door status - Hatchback status - Front left door locking - Front right door locking - Rear left door locking - Rear right door locking - Airbag triggering signal - Alarm LED - Xenon lamp status - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right
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- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn

Central electronics
Central electronics 1.0

- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status

			<ul style="list-style-type: none"> - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light 	
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
		<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed

					<ul style="list-style-type: none"> - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				S60 I - S60 I D5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors

Instrument cluster
Instrument cluster 1.0

- **Adjustments / settings**

- Read configuration
- Option display configuration
- Service interval adaptation
- Service interval display reset
- Activate/deactivate belt warning
- Parking brake warning tone

- **Error memory**

- **Current values**

- Failure lamp
- Engine revolution
- Warning lights
- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light

- **Actuators**

- Warning lights
- Failure lamp
- Tank reserve lamp triggering
- Gong
- Preheat control light
- Generator lamp
- Hi-beam lights, control light
- Rear fog lights control light
- Trailer turn signal, control light
- Airbag control light
- All displays and control lights
- ABS control light
- Brakes control light
- Parking brake, control light
- ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**

- **Clear errors**

- **Functional tests**

- ABS test

- **Error memory**

- **Current values**

- Vehicle driving speed
- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- Brake pedal position sensor
- Voltage at CEM
- Vehicle acceleration
- Front left wheel, speed signal
- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature

- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

• **Actuators**

- Inlet valve: front right front right
- Inlet valve: front left front left
- Exhaust valve: front left front left
- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window

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2.4

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Central electronics
Front central electronics 9.12.2

- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right

		<ul style="list-style-type: none"> - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1

					<ul style="list-style-type: none"> - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					S60 I - S60 I D	
Year	Engine	Liters	HP	System	Functions	
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering 	

		<ul style="list-style-type: none"> - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup

<p>2005/08 - 2009/07</p>	<p>D5244T7</p>	<p>2.4</p>	<p>126</p>	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Alternator voltage functional test • Adjustments / settings - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values - Vehicle driving speed - Total run

Central electronics
Front central electronics 9.12.2

- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side

	<ul style="list-style-type: none"> - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle

					- Central electronics power supply
				Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning

Instrument cluster
Instrument cluster 1.0

- Parking brake warning tone
- **Error memory**
- **Current values**
 - Failure lamp
 - Engine revolution
 - Warning lights
 - Kilometer reading
 - Fuel level in the tank
 - Rear fog light
 - Cooling agent temperature motor
 - Airbag signal lamp
 - Cruise control, control light
 - Oil pressure control lamp
 - Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left

				<ul style="list-style-type: none"> - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
2005/08 - 2006/07	D5244T6	2.4	122	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status

Central electronics
Front central electronics 9.12.2

- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay

				<ul style="list-style-type: none"> - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1

Year	Engine	Liters	HP	System	Functions
				Anti-block system ABS Teves Mk25 VER2	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
				Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition

	<ul style="list-style-type: none"> - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
<p style="text-align: center;">Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - Gear lever AT position - kick-down switch - Solenoid valve 1/2 - Engine revolution - Solenoid valve 3 - stop lights switch - Winter switch - Passenger compartment temperature - Control unit power supply - Inserted gear - system power supply - Engine status - gear box oil temperature - transmission ratio - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature

- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A

2002/06 - 2008/07	B5244SG	2.4	140	Central electronics Front central electronics 9.12.2	<ul style="list-style-type: none"> - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status - Rear right door status - Hatchback status - Front left door locking - Front right door locking - Rear left door locking - Rear right door locking - Airbag triggering signal - Alarm LED - Xenon lamp status - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch
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	<ul style="list-style-type: none"> - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3

				<ul style="list-style-type: none"> - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater

- Pump, hot water
- Combustion air blower PWM signal

VOLVO				S60 I - S60 I 2.4 Bi-Fuel LPG	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ABS Teves Mk25 VER2	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
				Gear box control	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature

5-gears automatic transmission 55-50/51SN1.0

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Convertor bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50

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Central electronics
Front central electronics 9.12.2

- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor

- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage
- Driving wheels angle
- Steering angle sensor signal voltage A1
- Steering angle sensor signal voltage A2
- Status of LED circuit A
- Status of LED circuit B

Steering wheel rotation angle sensor

Steering angle sensor 1.0	<ul style="list-style-type: none"> - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal

					<ul style="list-style-type: none"> - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
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VOLVO	S60 II - S60 II 2.0T
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Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side side <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests

Anti-block system
ESP Teves Mk25 E1

- ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

			<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp
2010/08 -	B4204T6	2.0	203	

Central electronics
Central electronics 3.0

- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

		<ul style="list-style-type: none"> • Actuators - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act. current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation

					<ul style="list-style-type: none"> - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S60 II - S60 II D3	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration 	

Airbag
Airbag AB 10

- Resistance side airbag driver's side
 - Resistance side airbag front passenger's side
 - Resistance windowbag driver's side
 - Resistance windowbag passenger's side
 - Front passenger airbag control light
 - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration

		<ul style="list-style-type: none"> - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear

6-gears automatic transmission TF80SC

- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request

2010/08 - 2011/07	D5204T2	2.0	163	<ul style="list-style-type: none"> - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering - Tank flap unlocking relay - Rear fog light relay - Windscreen washer system switch <p>Central electronics Central electronics 3.0</p>

- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch

Immobilizer
Access system/immobilizer 3.0

- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature

				<ul style="list-style-type: none"> - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status <ul style="list-style-type: none"> - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side <p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off

		<ul style="list-style-type: none"> - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA

<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4

					- Pressure control magnetic valve 5
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2012/08	D5204T7	2.0	136		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position

Central electronics
Central electronics 3.0

- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch

			<ul style="list-style-type: none"> - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject 	
		<p>Immobilizer Access system/immobilizer 3.0</p>		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side side <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed

Anti-block system
ESP Teves Mk25 E1

- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**

Gear box control
6-gears automatic transmission TF80SC

- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply

2010/08 - 2011/07	D5244T10	2.4	205	Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake <hr/> <ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch
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Central electronics
Central electronics 3.0

- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right

		<ul style="list-style-type: none"> - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status

				<ul style="list-style-type: none"> - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status

Airbag
Airbag AB 10

- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber

		<ul style="list-style-type: none"> - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message

				<ul style="list-style-type: none"> - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2011/08	D5244T15	2.4	215	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator)

Central electronics
Central electronics 3.0

- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA

Immobilizer
Access system/immobilizer 3.0

- Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject
- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button

		<ul style="list-style-type: none"> - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Current values - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO					S60 II - S60 II D5 AWD	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side <p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side 	

		<ul style="list-style-type: none"> - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA

		<ul style="list-style-type: none"> - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2010/08 - 2011/07	D5244T10	2.4	205		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch

Central electronics
Central electronics 3.0

- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay

		<ul style="list-style-type: none"> - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

Airbag
Airbag AB 10

- Vehicle driving speed
 - Battery voltage
 - Passenger compartment temperature
 - Kilometer reading
 - Voltage belt lock driver's side
 - Voltage belt lock front passenger's side
 - Longitudinal acceleration
 - Resistance side airbag driver's side
 - Resistance side airbag front passenger's side
 - Resistance windowbag driver's side
 - Resistance windowbag passenger's side
 - Front passenger airbag control light
 - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch,
- status
- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

Anti-block system

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed

ESP Teves Mk25 E1

- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio

Gear box control
6-gears automatic transmission TF80SC

- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuators during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input

				<ul style="list-style-type: none"> - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2011/08 -	D5244T15	2.4	215	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering

Central electronics
Central electronics 3.0

- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

Immobilizer
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				S60 II - S60 II T6 AWD	
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center

- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature

	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> - Rear right brake disc temperature • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic -

					<ul style="list-style-type: none"> - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2010/08	B6304T4	3.0	305		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch

Central electronics
Central electronics 3.0

- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering

		<ul style="list-style-type: none"> - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side <p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run

Anti-block system
ESP Teves Mk25 E1

- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button

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Central electronics
Central electronics 3.0

- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light

					- Ignition key eject
				Immobilizer Access system/immobilizer 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				S60 II - S60 II T4	
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center

- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature

				<ul style="list-style-type: none"> - Rear left brake disc temperature - Rear right brake disc temperature
			Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode

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Central electronics
Central electronics 3.0

adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left

- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button

Immobilizer
Access system/immobilizer 3.0

		<ul style="list-style-type: none"> - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
	<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status

					<ul style="list-style-type: none"> - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO					S60 II - S60 II T5	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status <ul style="list-style-type: none"> - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist. 	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings 	

Anti-block system
ESP Teves Mk25 E1

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2010/11 -</p>	<p>B4204T7</p>	<p>2.0</p>	<p>241</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay

Central electronics
Central electronics 3.0

- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay

		<ul style="list-style-type: none"> - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply

					<ul style="list-style-type: none"> - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S60 II - S60 II DRIVE	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side 	

Airbag
Airbag AB 10

- Resistance side airbag front passenger's side
 - Resistance windowbag driver's side
 - Resistance windowbag passenger's side
 - Front passenger airbag control light
 - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset

		<ul style="list-style-type: none"> - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button

				<ul style="list-style-type: none"> - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2011/08	D 4162T	1.6	116	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light

Central electronics
Central electronics 3.0

- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights

				<ul style="list-style-type: none"> - Side light/dipped beam/brake light - Ignition key eject
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supple./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S60 II - S60 II T4F	
Year	Engine	Liters	HP	System	Functions	
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel 	

- Seat belt lock switch 2 row center
- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature

				<ul style="list-style-type: none"> - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
			Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake

2010/11

B4164T2

1.6

180

Central electronics
Central electronics 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor

- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch

Immobilizer
Access system/immobilizer 3.0

- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply

					<ul style="list-style-type: none"> - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S60 II - S60 II 2.5T5	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, <p>status</p> <ul style="list-style-type: none"> - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's <p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right 	

		<ul style="list-style-type: none"> - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor

Electrical energy management
Battery management 3.0

- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2

					<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2011/08 - 2012/07	B5254T5	2.5	254		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values

Central electronics
Central electronics 3.0

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch

			<ul style="list-style-type: none"> - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject 	
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

Underbody/Steering
Adaptive damping system 3.0

• **Current values**

- Car level (horizontality) sensor output: rear left
- Car level (horizontality) sensor output: rear right
- Car level (horizontality) sensor output: front left
- Electronic control unit supply voltage
- Control unit, Voltage sensor 1
- Control unit, Voltage sensor 2
- Front left damper valve resistance
- Front right damper valve resistance
- Rear left damper valve resistance
- Rear right damper valve resistance
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve act. current
- Vehicle level sensor, front right
- Front left damper valve actuation
- Front right damper valve actuation
- Rear left damper valve actuation
- Rear right damper valve actuation
- Damper mode
- Front right acceleration sensor power supply
- Front left acceleration sensor power supply
- Rear left acceleration sensor power supply
- Front left damper status
- Front right damper status
- Rear left damper status
- Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Fuel warming up
- Total run
- Coolant temperature
- Battery voltage
- Passenger compartment temperature
- Starter
- Operating status
- Additional cooling fluid pump
- Glow plugs control
- Ambient temperature
- Auxiliary/supplementary heater operating time
- Auxiliary/supplementary heater heating time
- Electronic control unit power supply
- Glow plug
- Combustion air blower actuation
- Combustion air blower
- Supplem./auxiliary heater fuel pump
- Central electronics power supply

Parking assisting system
Park Distance Control 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Reverse gear
- Trailer detection
- Distance, left front, outside
- Distance, left front, inside
- Distance, right front, inside
- Distance, right front, outside
- Vehicle drive status
- Rear left outer distance
- Rear left inner distance
- Rear right outer distance
- Rear right inner distance

				<ul style="list-style-type: none"> - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side <p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed

Anti-block system
ESP Teves Mk25 E1

- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position

Gear box control
6-gears automatic transmission TF80SC

- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2

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Parking brake
Electrical parking brake 3.0

- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch

Central electronics
Central electronics 3.0

- Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right

		<ul style="list-style-type: none"> - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supple./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S60 II - S60 II D4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front 	

Airbag
Airbag AB 10

- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
- Steering wheel
- Seat belt lock switch 2 row center
- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset

		<ul style="list-style-type: none"> - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1

		<ul style="list-style-type: none"> - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch

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Central electronics
Central electronics 3.0

• **Adjustments / settings**

- Start mode
- Program sensor code (activator)
- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights

- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right

Immobilizer

Access system/immobilizer 3.0	<ul style="list-style-type: none"> - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO					S60 II - S60 II 2.0T4	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side <p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS 	

		<ul style="list-style-type: none"> - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA

		<ul style="list-style-type: none"> - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
		<ul style="list-style-type: none"> • Identification

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
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Central electronics
Central electronics 3.0

- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering

		<ul style="list-style-type: none"> - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side side <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values

Anti-block system
ESP Teves Mk25 E1

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position

Gear box control
6-gears automatic transmission TF80SC

- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2

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Parking brake
Electrical parking brake 3.0

- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch

Central electronics
Central electronics 3.0

- Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right

	<ul style="list-style-type: none"> - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S70 - S70 2.4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution 	

1999/08 - 2000/07	B5244S	2.4	170	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - Gear lever AT position - kick-down switch - Solenoid valve 1/2 - Engine revolution - Solenoid valve 3 - stop lights switch - Winter switch - Passenger compartment temperature - Control unit power supply - Inserted gear - system power supply - Engine status - gear box oil temperature - transmission ratio - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Solenoid switch valve 5

Gear box control
5-gears automatic transmission EGS 50-42
CAN

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - kick-down switch
 - Engine revolution
 - Winter switch
 - Oil temperature sensor gear box
 - Engine status
 - Gear selection position
 - gear box oil temperature
 - Direct transmission Converter lockup

					<ul style="list-style-type: none"> - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
1999/01 - 2000/07	B5244T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO					S70 - S70 2.4 AWD	
Year	Engine	Liters	HP	System	Functions	
					<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation <p>• Special functions</p> <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position 	

1999/08 - 2000/07	B5244S	2.4	170	Gear box control 5-gears automatic transmission 55-50/51SN1.0	<ul style="list-style-type: none"> - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
				Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current

					<ul style="list-style-type: none"> • Actuators - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
1999/01 - 2000/07	B5244T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO					
S70 - S70 2.0					
Year	Engine	Liters	HP	System	Functions
1997/01 - 1999/07	B5202 S	2.0	126	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed

					<ul style="list-style-type: none"> - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
1997/01 - 1998/07	B 5204 S	2.0	143	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO					S70 - S70 2.5	
Year	Engine	Liters	HP	System	Functions	
					<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch 	

1997/01 - 1999/07	B5252S	2.4	144	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO					
S70 - S70 2.5 20V					
Year	Engine	Liters	HP	System	Functions
1997/01 - 1999/07	B5254S	2.4	165	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO					
S70 - S70 2.3 T-5					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

1997/01 - 2000/07	B5234T3	2.3	240	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO S70 - S70 TDI					
Year	Engine	Liters	HP	System	Functions
1997/01 - 2000/07	D5252T	2.5	140	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1

- Gear shift solenoid valve 2
- Modulation pressure, solenoid
- Switch solenoid valve SLU

VOLVO					S70 - S70 2.0 T	
Year	Engine	Liters	HP	System	Functions	
1998/08 - 2000/07	B 5204 T3	2.0	226	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU 	
1997/01 - 1998/07	B5204T	2.0	210	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position 	

					<ul style="list-style-type: none"> - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO					
S70 - S70 R 2.3 T					
Year	Engine	Liters	HP	System	Functions
1997/01 - 1998/07	B5234T4	2.3	250	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO					
S70 - S70 2.3					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed

1997/01 - 1998/07	B5234T2	2.3	218	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
1997/01 - 1999/07	B5234S	2.3	163	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature

1998/08 - 2000/07	B5234T7	2.3	190	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO					
S70 - S70 2.5 T					
Year	Engine	Liters	HP	System	Functions
1997/01 - 1999/07	B5254T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

Year	Engine	Liters	HP	System	Functions
1998/08 - 1999/07	B5254T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO					
S70 - S70 2.5 Bifuel					
Year	Engine	Liters	HP	System	Functions
1998/08 - 1999/07	GB5252S	2.4	144	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2

					<ul style="list-style-type: none"> - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO S70 - S70 2.0 T 20V					
Year	Engine	Liters	HP	System	Functions
1998/08 - 2000/07	B5204T4	2.0	163	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO S70 - S70 R 2.3 T AWD					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution

1997/01 - 1998/07	B5234T4	2.3	250	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO					S70 - S70 2.0 T AWD	
Year	Engine	Liters	HP	System	Functions	
1998/08 - 2000/07	B5204T3	2.0	226	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU 	

VOLVO					S80 - S80 2.3i T	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors 	

Instrument cluster
Instrument cluster 1.0

- **Adjustments / settings**
 - Read configuration
 - Option display configuration
 - Service interval adaptation
 - Service interval display reset
 - Activate/deactivate belt warning
 - Parking brake warning tone
- **Error memory**
- **Current values**
 - Failure lamp
 - Engine revolution
 - Warning lights
 - Kilometer reading
 - Fuel level in the tank
 - Rear fog light
 - Cooling agent temperature motor
 - Airbag signal lamp
 - Cruise control, control light
 - Oil pressure control lamp
 - Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature

		<ul style="list-style-type: none"> - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

- **Special functions**

- Start gear indicator mode
- Start test mode

- **Error memory**

- **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode

- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

- **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**

- **Clear errors**

- **Functional tests**

- Alternator voltage functional test

- **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay

2000/07

B5204

2.3

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Central electronics
Front central electronics 9.12.2

- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right

- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn

Central electronics
Central electronics 1.0

- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status

			<ul style="list-style-type: none"> - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light 	
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
		<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed

					<ul style="list-style-type: none"> - Steering angle - Central electronics power supply
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					S80 I - S80 I 2.0T5	
Year	Engine	Liters	HP	System	Functions	
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong 	

		<ul style="list-style-type: none"> - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch

1998/08 - 2000/07	B5204T3	2.0	226	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
				<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
					<ul style="list-style-type: none"> • Identification • Clear errors

- **Functional tests**

- Alternator voltage functional test

- **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED

Central electronics
Central electronics 1.0

- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper

					<ul style="list-style-type: none"> - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					S80 I - S80 I 2.9	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status 	

- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply

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Central electronics
Central electronics 1.0

- Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor
 - Ignition key
 - Windscreen washing water level
 - Emergency lights switch
 - Front fog lights relay
 - Lights cleaning
 - Fog light switch
 - Indicator light, hazard warning lights system
 - Wiper
 - Front windscreen washer
 - Front windscreen wiper
 - Daytime driving light status
 - Fuel level left side
 - Fuel level right side
 - Status Generator
 - Ambient light sensor
 - Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Relay terminal 15
 - Windscreen wiper switch
 - Electronic control unit power supply
 - One-touch turn signal indication
 - Rear fog lights switch
 - Airbag system status
 - Hood monitoring
 - Passenger side belt warning
 - Headlight range control warning signal
 - Immobilizer: Start authorization
 - Rear wiper actuation by reverse gear
 - Battery temperature
 - Glove box light
 - Undervoltage shutoff threshold
 - Selector lever lock status
 - Dipped beam status
 - Transponder code
 - Transponder signal
 - Wiper relay 2
 - Rear window washer relay
 - Infotainment relay
 - Continued operation of headlights
 - Relay 4 terminal 15
- **Actuators**

				<ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading

Instrument cluster
Instrument cluster 1.0

- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

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- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking

Central electronics
Central electronics 1.0

- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock

				<ul style="list-style-type: none"> - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light

			<ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
		<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
			<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear

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Central electronics
Central electronics 1.0

- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor
 - Ignition key
 - Windscreen washing water level
 - Emergency lights switch
 - Front fog lights relay
 - Lights cleaning
 - Fog light switch
 - Indicator light, hazard warning lights system

- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Error memory**

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Current values - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
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VOLVO					S80 I - S80 I 2.8 T6	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights 	

		<ul style="list-style-type: none"> - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking

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Central electronics
Central electronics 1.0

- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch

	<ul style="list-style-type: none"> - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4

					<ul style="list-style-type: none"> - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed

1998/06 - 2001/07	B6284T	2.8	272	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal

Central electronics
Central electronics 1.0

- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2

				<ul style="list-style-type: none"> - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values

Instrument cluster
Instrument cluster 1.0

- Failure lamp
- Engine revolution
- Warning lights
- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right

- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status

Central electronics
Front central electronics 9.12.2

- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights

<p>2001/08 - 2004/12</p>	<p>B6284T</p>	<p>2.8</p>	<p>272</p>	<ul style="list-style-type: none"> - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay 				

Central electronics
Central electronics 1.0

- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

		<ul style="list-style-type: none"> • Actuators - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply

				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
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VOLVO					S80 I - S80 I 2.0T
Year	Engine	Liters	HP	System	Functions
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light

		<ul style="list-style-type: none"> - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current

1998/08 - 2000/07	B5204T4	2.0	163	<ul style="list-style-type: none"> • Actuators - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status

Central electronics
Central electronics 1.0

- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights

				<ul style="list-style-type: none"> - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light

		<ul style="list-style-type: none"> - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- Vehicle driving speed
- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply

Gear box control
 5-gears automatic transmission 55-
 50/51SN2.0

- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication

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Central electronics
Front central electronics 9.12.2

- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor
 - Ignition key
 - Windscreen washing water level
 - Emergency lights switch

- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking

Central electronics
Central electronics 1.0

- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring

		<ul style="list-style-type: none"> - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed

Anti-block system
ABS Teves Mk25 VER2

- Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
- Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission EGS 50-42
CAN

- **Identification**
- **Clear errors**
- **Adjustments / settings**
- Adaptive parameters reset
 - Transm. oil change interval reset
- **Error memory**
- **Current values**
- Power supply
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - kick-down switch
 - Engine revolution
 - Winter switch
 - Oil temperature sensor gear box
 - Engine status
 - Gear selection position
 - gear box oil temperature
 - Direct transmission Converter lockup
 - Brake pedal switch
 - Gearbox input speed
 - Magnetic valve transmission oil pressure
 - Key switch position
 - Gearshift solenoid valve, status 1
 - Gearshift solenoid valve, status 2
 - Gearbox oil pressure – set value
 - Switch solenoid valve SLU
 - Solenoid shift valve SLU current
- **Actuators**
- Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Modulation pressure, solenoid
 - Switch solenoid valve SLU

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle

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Central electronics
Central electronics 1.0

- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor
 - Ignition key
 - Windscreen washing water level

- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

- **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light

					- Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					S80 I - S80 I 2.4 Bi-Fuel LPG	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light 	

Instrument cluster
Instrument cluster 1.0

- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position

Gear box control
 5-gears automatic transmission 55-
 50/51SN2.0

- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**

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• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED

Central electronics
Front central electronics 9.12.2

- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper

- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay

Central electronics
Central electronics 1.0

- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump

		<ul style="list-style-type: none"> - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal

					<ul style="list-style-type: none"> - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
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VOLVO	S80 I - S80 I 2.4
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Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test

Anti-block system
ABS Teves Mk25 VER2

- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position

Gear box control
 5-gears automatic transmission 55-
 50/51SN2.0

- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting

- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30

1998/08
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2006/07

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2.4

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Central electronics
Front central electronics 9.12.2

- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature

- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control

Central electronics
Central electronics 1.0

- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front

- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage
- Driving wheels angle
- Steering angle sensor signal voltage A1
- Steering angle sensor signal voltage A2
- Status of LED circuit A
- Status of LED circuit B

Steering wheel rotation angle sensor
Steering angle sensor 1.0

					<ul style="list-style-type: none"> - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					S80 I - S80 I 2.0 T	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light 	

Instrument cluster
Instrument cluster 1.0

- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset

1998/08 - 2000/07	B5204T4	2.0	163	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation

Central electronics
Central electronics 1.0

- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear

			<ul style="list-style-type: none"> - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 <p>• Actuators</p> <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light 	
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM

Anti-block system
ABS Teves Mk25 VER2

- Vehicle acceleration
- Front left wheel, speed signal
- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3

- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up

- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay

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Central electronics
Front central electronics 9.12.2

- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door

Central electronics
Central electronics 1.0

- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization

		<ul style="list-style-type: none"> - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
		<ul style="list-style-type: none"> • Identification

				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

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S80 I - S80 I 2.4 T4 Bi-Fuel CNG					
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status

		<ul style="list-style-type: none"> - Parking brake, control light • Actuators - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - ABS test • Error memory • Current values - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions - Start gear indicator mode - Start test mode • Error memory • Current values - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- kick-down switch
- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error

Gear box control
 5-gears automatic transmission 55-50/51SN2.0

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear

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Central electronics
Front central electronics 9.12.2

- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor
 - Ignition key
 - Windscreen washing water level
 - Emergency lights switch
 - Front fog lights relay
 - Lights cleaning
 - Fog light switch
 - Indicator light, hazard warning lights system

- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

Central electronics
Central electronics 1.0

- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light

				<ul style="list-style-type: none"> - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
				Anti-block system	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal

ABS Teves Mk25 VER2

- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear

- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter

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Central electronics
Front central electronics 9.12.2

- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left

- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification

Central electronics
Central electronics 1.0

- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light

	<ul style="list-style-type: none"> - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				S80 I - S80 I 3.0	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights

		<ul style="list-style-type: none"> - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory

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Central electronics
Central electronics 1.0

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer

- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					S80 I - S80 I 3.0 T6	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights 	

Instrument cluster
Instrument cluster 1.0

- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left

- Pump motor

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode

- Seat heating adjustment

- Blower motor, run-on

- Reset undervoltage counter

- Reset crash detection signal

- Adjustment: Lighting on leaving vehicle

- Adjustment: One-touch turn signal indication

- Fuel tank cap locking

- Illumination system

- Daytime driving light adjustment

- Rear wiper with reverse gear

- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed

- Total run

- Contact switch

- Fuel pump relay

- start signal, terminal 50

- Cruise control

- Terminal 30

- Immobilizer

- engine control unit ignition blocking

- Terminal 15

- Start permission

- Output stage group A

- Output stage group B

- Function windscreen washing

- Function washing rear window washing

- End position windshield wiper

- Tank filling door

- Stationary heater/ventilation activation

- Supply voltage term.30

- Switch identification

- Vehicle model

- Transponder

- Signal horn

- Vehicle information (VIN)

- Transponder communication

- Generator, L-Signal

- Headlight level control signal

- Left xenon lamp signal

- Right xenon lamp signal

- Power supply relay

- Automatic transmission power supply

- Selector lever lock relay

- Relay starter

- Rear left window

- Rear right window

- Childproof lock relay

- Main beam relay

- Low-beam relay

- Stand light relay

- Relay, daytime running lights

- Front left door status

- Front right door status

- Rear left door status

- Rear right door status

- Hatchback status

- Front left door locking

- Front right door locking

Central electronics
Front central electronics 9.12.2

- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn

2006/07	B6294T	2.9	272	<ul style="list-style-type: none"> - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window 				

Central electronics
Central electronics 1.0

- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right

		<ul style="list-style-type: none"> - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor

			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
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VOLVO				S80 I - S80 I 2.4T	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position

2000/08 - 2003/07	B5244T3	2.4	200	<ul style="list-style-type: none"> - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay

Central electronics
Central electronics 1.0

- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

				<ul style="list-style-type: none"> • Actuators - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values - Failure lamp - Engine revolution - Warning lights

Instrument cluster
Instrument cluster 1.0

- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left

		<ul style="list-style-type: none"> - Pump motor
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking

Central electronics
Front central electronics 9.12.2

- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock

- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window

Central electronics
Central electronics 1.0

- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left

				<ul style="list-style-type: none"> - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor

			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
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VOLVO				S80 I - S80 I 2.5 AWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position

	<ul style="list-style-type: none"> - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
<p style="text-align: center;">Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - Gear lever AT position - kick-down switch - Solenoid valve 1/2 - Engine revolution - Solenoid valve 3 - stop lights switch - Winter switch - Passenger compartment temperature - Control unit power supply - Inserted gear - system power supply - Engine status - gear box oil temperature - transmission ratio - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage

- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing

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Central electronics
Front central electronics 9.12.2

- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning

- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run

Central electronics
Central electronics 1.0

- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side

- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage
- Driving wheels angle

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					S80 I - S80 I 2.5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank 	

Instrument cluster
Instrument cluster 1.0

- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

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- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal

Central electronics
Front central electronics 9.12.2

- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating

- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay

Central electronics
Central electronics 1.0

- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump

		<ul style="list-style-type: none"> - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	<p>Additional heater</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal

			Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
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VOLVO S80 I - S80 I 2.4T AWD

Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
					<ul style="list-style-type: none"> • Identification • Clear errors

Anti-block system
ABS Teves Mk25 VER2

- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5

				<ul style="list-style-type: none"> - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
<p>2000/08 - 2003/07</p>	<p>B5244T3</p>	<p>2.4</p>	<p>200</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay

Central electronics
Central electronics 1.0

- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay

		<ul style="list-style-type: none"> - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency

					<ul style="list-style-type: none"> - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
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VOLVO	S80 I - S80 I 2.3R
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Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage

Anti-block system
ABS Teves Mk25 VER2

- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- Brake pedal position sensor
- Voltage at CEM
- Vehicle acceleration
- Front left wheel, speed signal
- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value

		<ul style="list-style-type: none"> - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - Gear lever AT position - kick-down switch - Solenoid valve 1/2 - Engine revolution - Solenoid valve 3 - stop lights switch - Winter switch - Passenger compartment temperature - Control unit power supply - Inserted gear - system power supply - Engine status - gear box oil temperature - transmission ratio - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C

- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder

2000/04
-
2005/07

B5234T7

2.3

200
-
265

Central electronics
Front central electronics 9.12.2

- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status

- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15

Central electronics
Central electronics 1.0

- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply

	<ul style="list-style-type: none"> - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4

					<ul style="list-style-type: none"> - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				S80 II - S80 II D5	
Year	Engine	Liters	HP	System	Functions
				Anti-block system	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed

ESP Teves Mk25 E1

- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic

		<ul style="list-style-type: none"> - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Release parking brake - Parking brake apply • Adjustments / settings - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions - Tire monitoring system • Error memory • Current values - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch

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Central electronics
Central electronics 3.0

- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering

		<ul style="list-style-type: none"> - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2

				<ul style="list-style-type: none"> - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Underbody/Steering Adaptive damping system 3.0</p>	
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests

Anti-block system
ESP Teves Mk25 E1

- ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2008/11 - 2011/07</p>	<p>D5244T10</p>	<p>2.4</p>	<p>205</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay

Central electronics
Central electronics 3.0

- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator

				<ul style="list-style-type: none"> - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<ul style="list-style-type: none"> • Identification • Clear errors

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle

		<ul style="list-style-type: none"> - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
<p>Electrical energy management Battery management 3.0</p>		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission

Gear box control
6-gears automatic transmission TF80SC

- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor

				<ul style="list-style-type: none"> - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2011/08	D5244T15	2.4	215	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering

Central electronics
Central electronics 3.0

- Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**

Immobilizer
Access system/immobilizer 3.0

- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status

				Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				S80 II - S80 II 2.4D	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration

- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve

		<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading

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Central electronics
Central electronics 3.0

- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light

		<ul style="list-style-type: none"> - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act. current - Rear left damper valve act. current

				<ul style="list-style-type: none"> - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor

Anti-block system
ESP Teves Mk25 E1

- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**

Gear box control
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position

				<ul style="list-style-type: none"> - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2009/08 - 2010/07	D5244T19	2.4	163	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering

Central electronics
Central electronics 3.0

- Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**

Immobilizer
Access system/immobilizer 3.0

- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				S80 II - S80 II 2.5T	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset

- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2

		<ul style="list-style-type: none"> - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front

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Central electronics
Central electronics 3.0

- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light

		<ul style="list-style-type: none"> - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current

				<ul style="list-style-type: none"> - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation

Anti-block system
ESP Teves Mk25 E1

- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**

Gear box control
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right

				<ul style="list-style-type: none"> - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2009/08 - 2012/07	B5254T10	2.5	231	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering

Central electronics
Central electronics 3.0

- Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

• **Identification**

Immobilizer
Access system/immobilizer 3.0

- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset

		<ul style="list-style-type: none"> - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed

		<ul style="list-style-type: none"> - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification

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Central electronics
Central electronics 3.0

- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch

- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch

Immobilizer
Access system/immobilizer 3.0

- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply

					<ul style="list-style-type: none"> - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S80 II - S80 II 3.2	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset 	

		<ul style="list-style-type: none"> - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1

		<ul style="list-style-type: none"> - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system

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Central electronics
Central electronics 3.0

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay

	<ul style="list-style-type: none"> - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>• Identification</p> <p>• Clear errors</p>

Underbody/Steering
Adaptive damping system 3.0

- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation
 - Combustion air blower
 - Supplem./auxiliary heater fuel pump
 - Central electronics power supply

Parking assisting system
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Reverse gear
 - Trailer detection
 - Distance, left front, outside
 - Distance, left front, inside
 - Distance, right front, inside
 - Distance, right front, outside
 - Vehicle drive status
 - Rear left outer distance
 - Rear left inner distance
 - Rear right outer distance

				<ul style="list-style-type: none"> - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA

		<ul style="list-style-type: none"> - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch

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		<ul style="list-style-type: none"> - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset

		<ul style="list-style-type: none"> - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings

2006/08 - 2010/07	B6324S	3.2	238	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch
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Central electronics
Central electronics 3.0

- Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left

		<ul style="list-style-type: none"> - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status

					<ul style="list-style-type: none"> - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supple./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed

<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature

Gear box control
6-gears automatic transmission TF80SC

- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuations during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input

				<ul style="list-style-type: none"> - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2010/08 -	B6324S5	3.2	243	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing

Central electronics
Central electronics 3.0

- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light

	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> - Ignition key eject • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				S80 II - S80 II T6 AWD	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor

		<ul style="list-style-type: none"> - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission

Gear box control
6-gears automatic transmission TF80SC

- Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal

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3.0

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Central electronics
Central electronics 3.0

- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA

		<ul style="list-style-type: none"> - Number of no-load current events >120 mA - Battery voltage monitoring - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button

		<ul style="list-style-type: none"> - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
	Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

				<ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear left tire speed - rear right tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
				<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset

Electrical energy management
Battery management 3.0

• **Current values**

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current

• **Actuators**

- Gear shift solenoid valve 1

		<ul style="list-style-type: none"> - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation

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3.0

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Central electronics
Central electronics 3.0

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right

Immobilizer
Access system/immobilizer 3.0

- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation
 - Combustion air blower
 - Supplem./auxiliary heater fuel pump
 - Central electronics power supply

Parking assisting system
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Reverse gear
 - Trailer detection
 - Distance, left front, outside
 - Distance, left front, inside
 - Distance, right front, inside
 - Distance, right front, outside
 - Vehicle drive status
 - Rear left outer distance

					<ul style="list-style-type: none"> - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO	S80 II - S80 II D5 AWD
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions

Gear box control
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position

				<ul style="list-style-type: none"> - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2006/03 - 2009/07	D5244T4	2.4	185	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering

Central electronics
Central electronics 3.0

- Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

• **Identification**

Immobilizer
Access system/immobilizer 3.0

- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset

	<ul style="list-style-type: none"> - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
<p style="text-align: center;">Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4

	<p>- Pressure control magnetic valve 5</p> <ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam

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Central electronics
Central electronics 3.0

- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4

				<ul style="list-style-type: none"> - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>Underbody/Steering Adaptive damping system 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation

				<ul style="list-style-type: none"> - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory

Anti-block system
ESP Teves Mk25 E1

- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**

Gear box control
6-gears automatic transmission TF80SC

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**

				<ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2011/08	D5244T15	2.4	215	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch

Central electronics
Central electronics 3.0

- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left

		<ul style="list-style-type: none"> - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status

					- Rear right damper status
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supple./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S80 II - S80 II 2.0B	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage 	

Anti-block system
ESP Teves Mk25 E1

- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch

Gear box control
6-gears automatic transmission TF80SC

- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuations during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input
- Parking brake status, left
- Parking brake status, right
- Clutch pedal position
- Rear outer friction pad wearout sensor
- Parking brake, control light
- Actuation counter
- Left parking brake request
- Right parking brake request
- Status Handbrake

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Central electronics
Central electronics 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor

- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch

Immobilizer
Access system/immobilizer 3.0

- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug

					<ul style="list-style-type: none"> - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S80 II - S80 II 2.0 F Flexifuel	
Year	Engine	Liters	HP	System	Functions	
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset 	

		<ul style="list-style-type: none"> - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal

		<ul style="list-style-type: none"> - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions

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Central electronics
Central electronics 3.0

- Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position

		<ul style="list-style-type: none"> - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p>

Underbody/Steering
Adaptive damping system 3.0

- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation
 - Combustion air blower
 - Supplem./auxiliary heater fuel pump
 - Central electronics power supply

Parking assisting system
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Reverse gear
 - Trailer detection
 - Distance, left front, outside
 - Distance, left front, inside
 - Distance, right front, inside
 - Distance, right front, outside
 - Vehicle drive status
 - Rear left outer distance
 - Rear left inner distance

					<ul style="list-style-type: none"> - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO	S80 II - S80 II 2.0D
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage

Electrical energy management
Battery management 3.0

- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3

					<ul style="list-style-type: none"> - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2007/08 - 2010/07	D4204T	2.0	136		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam

Central electronics
Central electronics 3.0

- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4

		<ul style="list-style-type: none"> - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation

					<ul style="list-style-type: none"> - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				S80 II - S80 II 2.5 FT Flexifuel	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration

		<ul style="list-style-type: none"> - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear

6-gears automatic transmission TF80SC

- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuations during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change

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Central electronics
Central electronics 3.0

- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption

Immobilizer
Access system/immobilizer 3.0

- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button

		<ul style="list-style-type: none"> - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO S80 II - S80 II 2.5 FT Fexifuel

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement

Electrical energy management
Battery management 3.0

- Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**

		<ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right

2009/08 - 2012/07	B5254T11	2.5	231	Central electronics Central electronics 3.0	<ul style="list-style-type: none"> - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering - Tank flap unlocking relay - Rear fog light relay - Windscreen washer system switch - Center stop lamp actuation - Fog light switch - Rain sensor - Wiper switch - Light sensor - Rear fog lights switch - Washer fluid level monitoring - Backup lights - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery voltage monitoring - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button -
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		<ul style="list-style-type: none"> - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance

				Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S80 II - S80 II T5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests 	

Anti-block system
ESP Teves Mk25 E1

- ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

			<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch

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Central electronics
Central electronics 3.0

- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering

		<ul style="list-style-type: none"> - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA

				<ul style="list-style-type: none"> - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
			<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions

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Central electronics
Central electronics 3.0

- Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position

		<ul style="list-style-type: none"> - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p>

Underbody/Steering
Adaptive damping system 3.0

- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation
 - Combustion air blower
 - Supplem./auxiliary heater fuel pump
 - Central electronics power supply

Parking assisting system
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Reverse gear
 - Trailer detection
 - Distance, left front, outside
 - Distance, left front, inside
 - Distance, right front, inside
 - Distance, right front, outside
 - Vehicle drive status
 - Rear left outer distance
 - Rear left inner distance

					<ul style="list-style-type: none"> - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO	S80 II - S80 II D3
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear left tire speed - rear right tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage

Electrical energy management
Battery management 3.0

- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3

				<ul style="list-style-type: none"> - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply

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Central electronics
Central electronics 3.0

- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch

				<ul style="list-style-type: none"> - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control

			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> - Rear Park Distance Control • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature

		<ul style="list-style-type: none"> - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage

				<p>Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2011/08 - 2012/07</p>	<p>D5204T3</p>	<p>2.0</p>	<p>163</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left

Central electronics
Central electronics 3.0

- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status

		<ul style="list-style-type: none"> - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment

Anti-block system
ESP Teves Mk25 E1

- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply

Underbody/Steering
Electro hydraulic servo steering 3.0

- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light

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Central electronics
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

		<ul style="list-style-type: none"> - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S80 II - S80 II 3.0T	
Year	Engine	Liters	HP	System	Functions	

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value

- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights

				<ul style="list-style-type: none"> - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left
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Central electronics
Central electronics 3.0

- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status

		<ul style="list-style-type: none"> - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current

				Adaptive damping system 3.0	<ul style="list-style-type: none"> - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				S80 II - S80 II T4F	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test

Anti-block system
ESP Teves Mk25 E1

• Adjustments / settings

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation

• Special functions

- Bleed

• Error memory

• Current values

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management
Battery management 3.0

• Identification

• Adjustments / settings

- Battery replacement
- Battery sensor adaptation reset

• Current values

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

• Identification

<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch

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Central electronics
Central electronics 3.0

- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering

		<ul style="list-style-type: none"> - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status

		<ul style="list-style-type: none"> - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2012/08 -</p>	<p>D5204T3</p>	<p>2.0</p>	<p>163</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light

Central electronics
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

		<ul style="list-style-type: none"> - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> - Ignition key eject <p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance

				Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				S80 II - S80 II DRIVe	
Year	Engine	Liters	HP	System	Functions
					• Identification

Anti-block system
ESP Teves Mk25 E1

- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection

			<ul style="list-style-type: none"> - Battery charge/discharge current
		<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
		<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
			<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position

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Central electronics
Central electronics 3.0

- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch

<ul style="list-style-type: none"> - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p> <p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left

Underbody/Steering
Adaptive damping system 3.0

- Car level (horizontal) sensor output: rear right
- Car level (horizontal) sensor output: front left
- Electronic control unit supply voltage
- Control unit, Voltage sensor 1
- Control unit, Voltage sensor 2
- Front left damper valve resistance
- Front right damper valve resistance
- Rear left damper valve resistance
- Rear right damper valve resistance
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve act. current
- Vehicle level sensor, front right
- Front left damper valve actuation
- Front right damper valve actuation
- Rear left damper valve actuation
- Rear right damper valve actuation
- Damper mode
- Front right acceleration sensor power supply
- Front left acceleration sensor power supply
- Rear left acceleration sensor power supply
- Front left damper status
- Front right damper status
- Rear left damper status
- Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation
 - Combustion air blower
 - Supplem./auxiliary heater fuel pump
 - Central electronics power supply

Parking assisting system
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Reverse gear
 - Trailer detection
 - Distance, left front, outside
 - Distance, left front, inside
 - Distance, right front, inside
 - Distance, right front, outside
 - Vehicle drive status
 - Rear left outer distance
 - Rear left inner distance
 - Rear right outer distance
 - Rear right inner distance
 - Distance sensors
 - Front Park Distance Control

VOLVO				S80 II - S80 II 1.6D DRIVe	
Year	Engine	Liters	HP	System	Functions
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request

- Right parking brake request
- Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch

Central electronics
Central electronics 3.0

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- Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch

Immobilizer
Access system/immobilizer 3.0

- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature

					<ul style="list-style-type: none"> - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				S80 II - S80 II 2.0T	
Year	Engine	Liters	HP	System	Functions
				<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values

Gear box control
6-gears automatic transmission TF80SC

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter

					<ul style="list-style-type: none"> - Left parking brake request - Right parking brake request - Status Handbrake
2010/08	B4204T6	2.0	203	Central electronics	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering - Tank flap unlocking relay - Rear fog light relay

Central electronics 3.0

- Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**

Immobilizer
Access system/immobilizer 3.0

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control

					<ul style="list-style-type: none"> - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			Parking assisting system Park Distance Control 3.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					S80 II - S80 II V8 AWD	
Year	Engine	Liters	HP	System	Functions	
				Gear box control 6-gears automatic transmission TF80SC	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed 	

		<ul style="list-style-type: none"> - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode

				<p>Central electronics Central electronics 3.0</p>	<p>adaptation</p> <ul style="list-style-type: none"> • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering - Tank flap unlocking relay - Rear fog light relay - Windscreen washer system switch - Center stop lamp actuation - Fog light switch - Rain sensor - Wiper switch - Light sensor - Rear fog lights switch - Washer fluid level monitoring - Backup lights - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery voltage monitoring - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left
<p>2006/03 - 2010/12</p>	<p>B8444S</p>	<p>4.4</p>	<p>315</p>		

- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button

Immobilizer
Access system/immobilizer 3.0

<p>Underbody/Steering Adaptive damping system 3.0</p>	<p>- Center interior antenna</p> <ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status

					<ul style="list-style-type: none"> - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO	V40 CROSS COUNTRY - V40 1.6 T4 CROSS COUNTRY
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Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side side - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings

Anti-block system
ESP Teves Mk60 UDS

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Mileage
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - ESP switch
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Power supply voltages
 - Calculated front left brake temperature
 - Calculated front right brake temperature
 - Calculated rear left brake temperature
 - Calculated rear right brake temperature
 - Stored brake pressure sensor offset
 - Steering angle offset

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**

2013/01	B4164T	1.6	180	Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light

Central electronics
Central electronics 3.0

- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights

					<ul style="list-style-type: none"> - Side light/dipped beam/brake light - Ignition key eject
				<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply

VOLVO					
V40 CROSS COUNTRY - V40 2.0 T5 CROSS COUNTRY					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side

Airbag
Airbag AB 10

- Voltage belt lock front passenger's side
 - Longitudinal acceleration
 - Resistance side airbag driver's side
 - Resistance side airbag front passenger's side
 - Resistance windowbag driver's side
 - Resistance windowbag passenger's side
 - Front passenger airbag control light
 - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk60 UDS

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Mileage
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle

		<ul style="list-style-type: none"> - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery

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2.0

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Central electronics
Central electronics 3.0

change

- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring

	<ul style="list-style-type: none"> - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna

					<ul style="list-style-type: none"> - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			Additional heater Auxiliary/supplementary heater 3.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply

VOLVO					
V40 CROSS COUNTRY - V40 2.0 T5 AWD CROSS COUNTRY					
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side

		<ul style="list-style-type: none"> - Resistance ZK1 front airbag front passenger's side - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
	<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage

				<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
<p>2013/01 -</p>	<p>B5204T9</p>	<p>2.0</p>	<p>214</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front

Central electronics
Central electronics 3.0

- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light

		<ul style="list-style-type: none"> - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply

					<ul style="list-style-type: none"> - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
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VOLVO	V40 CROSS COUNTRY - V40 2.5 T5 CROSS COUNTRY
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Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side side - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment

Anti-block system
ESP Teves Mk60 UDS

- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Mileage
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - ESP switch
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Power supply voltages
 - Calculated front left brake temperature
 - Calculated front right brake temperature
 - Calculated rear left brake temperature
 - Calculated rear right brake temperature
 - Stored brake pressure sensor offset
 - Steering angle offset

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
<p>2013/01 -</p>	<p>B5254T12</p>	<p>2.5</p>	<p>254</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering

Central electronics
Central electronics 3.0

- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

				<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply

VOLVO V40 CROSS COUNTRY - V40 2.5 T5 AWD CROSS COUNTRY					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration

Airbag
Airbag AB 10

- Resistance side airbag driver's side
 - Resistance side airbag front passenger's side
 - Resistance windowbag driver's side
 - Resistance windowbag passenger's side
 - Front passenger airbag control light
 - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk60 UDS

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Mileage
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - ESP switch
 - Yaw rate sensor offset

		<ul style="list-style-type: none"> - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after

2013/01

B5254T12

2.5

254

Central electronics
Central electronics 3.0

battery change

- Read out alarm sources
- Instrument cluster illumination day/night mode

adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes

	<ul style="list-style-type: none"> - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button

					<ul style="list-style-type: none"> - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply

VOLVO					
V40 CROSS COUNTRY - V40 1.6 D2 CROSS COUNTRY					
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side <p>side</p>

		<ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
	<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor

2013/01 -	D4162T	1.6	114	Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination

Central electronics
Central electronics 3.0

- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1

		<ul style="list-style-type: none"> - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug

- Combustion air blower actuation
- Combustion air blower
- Supplem./auxiliary heater fuel pump
- Central electronics power supply

VOLVO V40 CROSS COUNTRY - V40 2.0 D3 CROSS COUNTRY

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position

Anti-block system
ESP Teves Mk60 UDS

- adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Mileage
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - ESP switch
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Power supply voltages
 - Calculated front left brake temperature
 - Calculated front right brake temperature
 - Calculated rear left brake temperature
 - Calculated rear right brake temperature
 - Stored brake pressure sensor offset
 - Steering angle offset

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Underbody/Steering

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights

2013/01 -	D5204T6	2.0	150	Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering

Central electronics
Central electronics 3.0

- Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

• **Identification**

				<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Immobilizer Access system/immobilizer 3.0</p>	
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supple./auxiliary heater fuel pump - Central electronics power supply

VOLVO					V40 CROSS COUNTRY - V40 2.0 D4 CROSS COUNTRY	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side 	

Airbag
Airbag AB 10

- Resistance side airbag front passenger's side
 - Resistance windowbag driver's side
 - Resistance windowbag passenger's side
 - Front passenger airbag control light
 - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch,
- status
- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk60 UDS

- **Identification**
 - **Clear errors**
 - **Functional tests**
 - ESP test
 - **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position
- adjustment
- Longitudinal acceleration sensor zero position
- adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
 - **Error memory**
 - **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Mileage
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - ESP switch
 - Yaw rate sensor offset
 - Brake pressure sensor offset

				<ul style="list-style-type: none"> - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
			Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change

2013/01

D5204T4

2.0

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Central electronics
Central electronics 3.0

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value

- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna

Immobilizer
Access system/immobilizer 3.0

					<ul style="list-style-type: none"> - Rear left antenna - Start/Stop button - Center interior antenna
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply

VOLVO					
V40 CROSS COUNTRY - V40 2.0 T4 CROSS COUNTRY					
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status <ul style="list-style-type: none"> - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side <p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left

		<ul style="list-style-type: none"> - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
	<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage

2013/01 -	B5204T8	2.0	180	Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch

Central electronics
Central electronics 3.0

- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3

		<ul style="list-style-type: none"> - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower

- Supplem./auxiliary heater fuel pump
- Central electronics power supply

VOLVO				V40 I - V40 I T4	
Year	Engine	Liters	HP	System	Functions
2002/09 - 2004/08	B4204T4	1.9	172	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - Gear lever AT position - kick-down switch - Solenoid valve 1/2 - Engine revolution - Solenoid valve 3 - stop lights switch - Winter switch - Passenger compartment temperature - Control unit power supply - Inserted gear - system power supply - Engine status - gear box oil temperature - transmission ratio - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value

					<ul style="list-style-type: none"> - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
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VOLVO					V40 I - V40 I 1.8 16V	
Year	Engine	Liters	HP	System	Functions	
1997/08 - 2000/07	B4184SM	1.8	125	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU 	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset 	

1995/01 - 1999/07	B4184S	1.8	115	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
1999/08 - 2004/04	B4184S2	1.8	122	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

2000/08 - 2004/04	B4184SJ	1.8	122	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
1999/04 - 2004/06	B4184S10	1.8	122	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO					V40 I - V40 I 2.0	
Year	Engine	Liters	HP	System	Functions	
1996/01 - 1999/07	B4204S	2.0	140	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU 	

VOLVO					V40 I - V40 I 1.6 16V	
Year	Engine	Liters	HP	System	Functions	
1997/01 - 1999/07	B4164S	1.6	105	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position 	

					<ul style="list-style-type: none"> - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
1999/08 - 2004/04	B4164S2	1.6	109	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO					
V40 I - V40 I 1.9 T4					
Year	Engine	Liters	HP	System	Functions
1997/05 -	B4194T	1.9	200	Gear box control 5-gears automatic transmission EGS 50-42	<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status

1999/07				CAN	<ul style="list-style-type: none"> - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
1999/08 - 2000/07	B4194T2	1.9	200	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch

2000/08 - 2002/12	B4194T2	1.9	200	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO					
V40 I - V40 I 2.0 16V T					
Year	Engine	Liters	HP	System	Functions
1998/04 - 1999/07	B4204T	2.0	160	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position

1999/08 - 2000/07	B4204T2	1.9	160	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO					V40 I - V40 I 2.0 T	
Year	Engine	Liters	HP	System	Functions	
2001/08 - 2004/04	B4204T3	1.9	163	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU 	
					<ul style="list-style-type: none"> • Identification • Clear errors 	

2000/08 - 2001/07	B4204T3	2.0	165	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO V40 I - V40 I 2.0 T4					
Year	Engine	Liters	HP	System	Functions
2000/08 - 2004/04	B4204T5	2.0	200	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators

					<ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO					
V40 I - V40 I 2.0 16V					
Year	Engine	Liters	HP	System	Functions
1999/08 - 2004/04	B4204S2	2.0	136	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO					
V40 II - V40 II T3					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side

Airbag
Airbag AB 10

front

- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch, status
 - Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk60 UDS

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Mileage
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - ESP switch
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset

		<ul style="list-style-type: none"> - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system

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Central electronics
Central electronics 3.0

- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay

Immobilizer
Access system/immobilizer 3.0

- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• Actuators

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• Identification

• Clear errors

• Error memory

• Current values

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

• Identification

• Clear errors

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
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VOLVO					V40 II - V40 II T4	
Year	Engine	Liters	HP	System	Functions	
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, <p>status</p> <ul style="list-style-type: none"> - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side <p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS 	

			<ul style="list-style-type: none"> - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
		<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
		<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA

					<ul style="list-style-type: none"> - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
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Central electronics
Central electronics 3.0

- Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**

				<ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side side <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor

Anti-block system
ESP Teves Mk60 UDS

- Vehicle driving speed
- Mileage
- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- ESP switch
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Power supply voltages
- Calculated front left brake temperature
- Calculated front right brake temperature
- Calculated rear left brake temperature
- Calculated rear right brake temperature
- Stored brake pressure sensor offset
- Steering angle offset

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

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Central electronics
Central electronics 3.0

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test
- Brake light/brake pedal position switch

• **Adjustments / settings**

- Start mode
- Program sensor code (activator)
- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor

- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact

				Immobilizer Access system/immobilizer 3.0	<ul style="list-style-type: none"> - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply

VOLVO				V40 II - V40 II D3	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat

Airbag
Airbag AB 10

- Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
- Steering wheel
- Seat belt lock switch 2 row center
- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk60 UDS

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Mileage
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - ESP switch
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Power supply voltages
 - Calculated front left brake temperature

				<ul style="list-style-type: none"> - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
			Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply
2012/03	D5204T6	2.0	150	

Central electronics
Central electronics 3.0

- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch

	<ul style="list-style-type: none"> - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Fuel warming up

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
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VOLVO					V40 II - V40 II D4	
Year	Engine	Liters	HP	System	Functions	
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status <ul style="list-style-type: none"> - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side side <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side 	

		<ul style="list-style-type: none"> - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
	<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset

					<ul style="list-style-type: none"> - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
2012/03	D5204T4	2.0	177		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch

Central electronics
Central electronics 3.0

- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left

					<ul style="list-style-type: none"> - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna 	
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply 	

VOLVO				V40 II - V40 II T5	
Year	Engine	Liters	HP	System	Functions

Airbag
Airbag AB 10

- **Identification**
 - **Clear errors**
 - **Error memory**
 - **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Passenger compartment temperature
 - Kilometer reading
 - Voltage belt lock driver's side
 - Voltage belt lock front passenger's side
 - Longitudinal acceleration
 - Resistance side airbag driver's side
 - Resistance side airbag front passenger's side
 - Resistance windowbag driver's side
 - Resistance windowbag passenger's side
 - Front passenger airbag control light
 - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch,
- status
- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Mileage
 - Battery voltage

Anti-block system
ESP Teves Mk60 UDS

- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- ESP switch
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Power supply voltages
- Calculated front left brake temperature
- Calculated front right brake temperature
- Calculated rear left brake temperature
- Calculated rear right brake temperature
- Stored brake pressure sensor offset
- Steering angle offset

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

- **Identification**
- **Clear errors**

2013/03

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2.5

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Central electronics
Central electronics 3.0

• **Functional tests**

- Alternator voltage functional test
- Brake light/brake pedal position switch

• **Adjustments / settings**

- Start mode
- Program sensor code (activator)
- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor

- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch

				Immobilizer Access system/immobilizer 3.0	<ul style="list-style-type: none"> - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply

VOLVO					V50 - V50 T5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed 	

Anti-block system
ESP Teves Mk60

- rare right tire speed
- rear left tire speed
- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio

2004/04 - 2007/07	B5254T3	2.5	220	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature

		<ul style="list-style-type: none"> - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button

				<ul style="list-style-type: none"> - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed

Anti-block system
ESP Teves Mk60

- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1

2007/08 - 2012/12	B5254T7	2.5	230	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering

	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> - Power steering motor specified speed - Power steering motor actual speed <ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation

					<ul style="list-style-type: none"> - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			Electrical energy management Battery management 2.0		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					V50 - V50 2.4	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle 	

ESP Teves Mk60

- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1

2004/04 - 2010/07	B5244S5	2.4	140	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests

Central electronics
Central electronics, front, 9.12.1

- Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Basic adjustment, headlights auto adjustment
 - Reset undervoltage counter
 - Reset crash detection signal
 - Rear wiper with reverse gear
- **Error memory**
- **Current values**
 - Fuel pump relay
 - Power supply
 - Clutch switch
 - brake fluid level
 - Light switch
 - Back-up lights
 - Ignition key position
 - Main beam relay
 - Key code
 - Ignition key
 - Status Ignition lock
 - Windscreen washing water level
 - Front fog lights relay
 - Rear window wiper
 - Front windscreen wiper
 - Rear window froster relay
 - Vehicle power supply status
 - Headlight washer pump relay
 - Orientation light potentiometer
 - Rain sensor
 - Gas pedal position
 - Windshield washer relay
 - Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door

					<ul style="list-style-type: none"> - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					V50 - V50 2.4i	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor 	

Anti-block system
ESP Teves Mk60

- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4

2004/04 - 2010/07	B5244S4	2.4	170 - 170	Gear box control 5-gears automatic transmission 55-50/51SN2.0	<ul style="list-style-type: none"> - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					• Identification

Central electronics
Central electronics, front, 9.12.1

- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Basic adjustment, headlights auto adjustment
 - Reset undervoltage counter
 - Reset crash detection signal
 - Rear wiper with reverse gear
- **Error memory**
- **Current values**
 - Fuel pump relay
 - Power supply
 - Clutch switch
 - brake fluid level
 - Light switch
 - Back-up lights
 - Ignition key position
 - Main beam relay
 - Key code
 - Ignition key
 - Status Ignition lock
 - Windscreen washing water level
 - Front fog lights relay
 - Rear window wiper
 - Front windscreen wiper
 - Rear window froster relay
 - Vehicle power supply status
 - Headlight washer pump relay
 - Orientation light potentiometer
 - Rain sensor
 - Gas pedal position
 - Windshield washer relay
 - Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door

					<ul style="list-style-type: none"> - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO				V50 - V50 2.0D	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed

Anti-block system
ESP Teves Mk60

- Passenger compartment temperature
- Engine status
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Kilometer reading
- Transmission skidding control
- Brake exertion electrical distribution
- Steering wheel rotational speed
- Ambient temperature
- Brake pedal travel
- ABS control
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored steering angle sensor offset
- Vehicle acceleration
- Brake pressure sensor
- Stored brake pressure sensor offset
- ESP control
- Yaw rate sensor, offset
- Front left wheel acceleration
- Front right wheel acceleration
- Rear left wheel acceleration
- Rear right wheel acceleration
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- Torque reduction request by ASR
- Central electronics power supply
- Steering direction

Underbody/Steering
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30
 - Steering wheel rotational speed
 - Engine status
 - Pump motor steering assistance
 - Power steering motor activation current
 - Power steering
 - Power steering motor activation
 - Power steering motor temperature
 - Speed-dependent power steering
 - Power steering motor specified speed
 - Power steering motor actual speed

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Basic adjustment, headlights auto adjustment
 - Reset undervoltage counter
 - Reset crash detection signal
 - Rear wiper with reverse gear
- **Error memory**
- **Current values**
 - Fuel pump relay

- 2010/07	D4204T	2.0	136	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance

				<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
				<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset

2004/04 - 2007/07	D4204T2	2.0	131		<ul style="list-style-type: none"> - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer

				<ul style="list-style-type: none"> - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status

					<ul style="list-style-type: none"> - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO	V50 - V50 1.6D DRIVE
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature

2004/11 - 2010/07	D4164T...	1.6	109 - 110		<ul style="list-style-type: none"> - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
				Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
	<ul style="list-style-type: none"> • Identification 				

				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance

VOLVO				V50 - V50 1.8	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature

2004/04 -	B4184S11	1.8	125	<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply

Central electronics
Central electronics, front, 9.12.1

- Clutch switch
- brake fluid level
- Light switch
- Back-up lights
- Ignition key position
- Main beam relay
- Key code
- Ignition key
- Status Ignition lock
- Windscreen washing water level
- Front fog lights relay
- Rear window wiper
- Front windscreen wiper
- Rear window froster relay
- Vehicle power supply status
- Headlight washer pump relay
- Orientation light potentiometer
- Rain sensor
- Gas pedal position
- Windshield washer relay
- Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door
 - Lock rear left door

Parking assisting system
Park Distance Control 9.12.1

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Calculated distance at rear
 - Calculated front distance

- **Identification**

				<p>Electrical energy management Battery management 2.0</p> <ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO					V50 - V50 1.6	
Year	Engine	Liters	HP	System	Functions	
				<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control 	

					<ul style="list-style-type: none"> - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
				<p>Underbody/Steering Electro-hydraulic power steering 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
2005/01 - 2012/12	B4164S3	1.6	100	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper

		<ul style="list-style-type: none"> - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA

					<ul style="list-style-type: none"> - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO	V50 - V50 T5 AWD
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration

		<ul style="list-style-type: none"> - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - Gear lever AT position - kick-down switch - Solenoid valve 1/2 - Engine revolution - Solenoid valve 3 - stop lights switch - Winter switch - Passenger compartment temperature - Control unit power supply - Inserted gear - system power supply - Engine status - gear box oil temperature - transmission ratio - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C

2004/04 - 2007/07	B5254T3	2.5	220	<ul style="list-style-type: none"> - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock

		<ul style="list-style-type: none"> - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
	<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage

			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
			<p>Anti-block system ESP Teves Mk60</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration

		<ul style="list-style-type: none"> - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - Gear lever AT position - kick-down switch - Solenoid valve 1/2 - Engine revolution - Solenoid valve 3 - stop lights switch - Winter switch - Passenger compartment temperature - Control unit power supply - Inserted gear - system power supply - Engine status - gear box oil temperature - transmission ratio - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C

2007/08 - 2010/08	B5254T7	2.5	230	<ul style="list-style-type: none"> - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper

		<ul style="list-style-type: none"> - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
	<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
	<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value)

					<ul style="list-style-type: none"> - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO	V50 - V50 D5
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature

		<ul style="list-style-type: none"> - Torque reduction request by ASR - Central electronics power supply - Steering direction
	<p>Gear box control 5-gears automatic transmission 55-50/51SN2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - Gear lever AT position - kick-down switch - Solenoid valve 1/2 - Engine revolution - Solenoid valve 3 - stop lights switch - Winter switch - Passenger compartment temperature - Control unit power supply - Inserted gear - system power supply - Engine status - gear box oil temperature - transmission ratio - gear box control error - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Direct transmission Converter lockup - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Torque limitation - Kilometer reading - Gearbox input speed - Gearbox speed sensor (input) - Solenoid valve 4/5 - Solenoid switch valve 5 - Transmission output speed - Engine torque - Ambient temperature - Transformer bridging magnetic valve - Transmission oil temperature sensor voltage - Selector lever module - Torque reduction on changing gear - Transmission output torque - Transmission oil temper. on starting - Time within 100 - 110 °C - Time within 110 - 120 °C - Time within 120 - 130 °C - Time within 130 - 140 °C - Time within 140 - 150 °C - Time > 150 °C - Press. regul. sol. valve 1 set value - Pressure regulator solenoid valve 1 actual value - Pressure regulator solenoid valve 2 set value - Pressure regulator solenoid valve 2 actual value - Set value, solenoid valve, torque conv. lock-up

2006/04 - 2010/07	D5244T8...	2.4	180	<ul style="list-style-type: none"> - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
			Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
			Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer

				<ul style="list-style-type: none"> - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status

					<ul style="list-style-type: none"> - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO	V50 - V50 1.8 F Flexifuel
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature

2006/04 - 2010/07	B4184S8	1.8	125	Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system

			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Passenger compartment temperature - Engine status - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Kilometer reading - Transmission skidding control - Brake exertion electrical distribution - Steering wheel rotational speed - Ambient temperature - Brake pedal travel - ABS control - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored steering angle sensor offset - Vehicle acceleration - Brake pressure sensor - Stored brake pressure sensor offset - ESP control - Yaw rate sensor, offset - Front left wheel acceleration - Front right wheel acceleration - Rear left wheel acceleration - Rear right wheel acceleration - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature - Torque reduction request by ASR - Central electronics power supply - Steering direction
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed

2006/10 - 2012/12	B4204S3	2.0	145	Underbody/Steering Electro-hydraulic power steering 2.0	<ul style="list-style-type: none"> - Battery voltage - control unit temperature - Power supply terminal 30 - Steering wheel rotational speed - Engine status - Pump motor steering assistance - Power steering motor activation current - Power steering - Power steering motor activation - Power steering motor temperature - Speed-dependent power steering - Power steering motor specified speed - Power steering motor actual speed
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact

				Immobilizer Access system/immobilizer 2.0	<ul style="list-style-type: none"> - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					V50 - V50 2.0 F Flexifuel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test - ASR test - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position 	

Anti-block system
ESP Teves Mk60

- adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Longitudinal acceleration sensor
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Passenger compartment temperature
 - Engine status
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Kilometer reading
 - Transmission skidding control
 - Brake exertion electrical distribution
 - Steering wheel rotational speed
 - Ambient temperature
 - Brake pedal travel
 - ABS control
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored steering angle sensor offset
 - Vehicle acceleration
 - Brake pressure sensor
 - Stored brake pressure sensor offset
 - ESP control
 - Yaw rate sensor, offset
 - Front left wheel acceleration
 - Front right wheel acceleration
 - Rear left wheel acceleration
 - Rear right wheel acceleration
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
 - Torque reduction request by ASR
 - Central electronics power supply
 - Steering direction

Underbody/Steering
Electro-hydraulic power steering 2.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - control unit temperature
 - Power supply terminal 30
 - Steering wheel rotational speed
 - Engine status
 - Pump motor steering assistance
 - Power steering motor activation current
 - Power steering
 - Power steering motor activation
 - Power steering motor temperature
 - Speed-dependent power steering
 - Power steering motor specified speed
 - Power steering motor actual speed

<p>2009/08 - 2012/12</p>	<p>B4204S4</p>	<p>2.0</p>	<p>146</p>	<p>Central electronics Central electronics, front, 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button

					<ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				Parking assisting system Park Distance Control 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				Electrical energy management Battery management 2.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					V50 - V50 D2 DRIVe	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed 	

					<ul style="list-style-type: none"> - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
2011/08 - 2012/12	D4162T	1.6	114	Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay

				<ul style="list-style-type: none"> - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay <ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
			<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
			<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA

					<ul style="list-style-type: none"> - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current
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VOLVO	V50 - V50 D3
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk60 UDS	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions

2010/08 - 2012/12	D5204T5	2.0	150	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests

Central electronics
Central electronics, front, 9.12.1

- Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Basic adjustment, headlights auto adjustment
 - Reset undervoltage counter
 - Reset crash detection signal
 - Rear wiper with reverse gear
- **Error memory**
- **Current values**
 - Fuel pump relay
 - Power supply
 - Clutch switch
 - brake fluid level
 - Light switch
 - Back-up lights
 - Ignition key position
 - Main beam relay
 - Key code
 - Ignition key
 - Status Ignition lock
 - Windscreen washing water level
 - Front fog lights relay
 - Rear window wiper
 - Front windscreen wiper
 - Rear window froster relay
 - Vehicle power supply status
 - Headlight washer pump relay
 - Orientation light potentiometer
 - Rain sensor
 - Gas pedal position
 - Windshield washer relay
 - Rear window washer relay
- **Actuators**
 - Windshield washer system relay
 - Fog light
 - Headlights cleaning system
 - Relay for high-beam headlights
 - Rear window washer system

Immobilizer
Access system/immobilizer 2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adjustment: Unlocking options
- **Error memory**
- **Current values**
 - Power supply
 - Rear top unlocking switch
 - Brake pedal switch
 - Clutch pedal switch
 - Number of stored keys
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Remote control: Unlocking options
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Front left door handle button
 - Front right door handle button
 - Ignition lock activation
 - Rear right door handle button
 - Rear left door handle button
- **Actuators**
 - Unlock driver's door
 - Unlock front passenger's door
 - Unlock rear left door

				<ul style="list-style-type: none"> - Lock rear left door • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
			<p>Parking assisting system Park Distance Control 9.12.1</p>	
			<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO					V50 - V50 D4	
Year	Engine	Liters	HP	System	Functions	
				<p>Anti-block system ESP Teves Mk60 UDS</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Longitudinal acceleration sensor - Vehicle driving speed - Mileage - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle 	

	<ul style="list-style-type: none"> - reflexive angle - ESP switch - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Power supply voltages - Calculated front left brake temperature - Calculated front right brake temperature - Calculated rear left brake temperature - Calculated rear right brake temperature - Stored brake pressure sensor offset - Steering angle offset
	<p>Gear box control 6-gears automatic transmission TF80SC</p> <ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2

2010/08 - 2012/12	D5204T	2.0	177	Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				Central electronics Central electronics, front, 9.12.1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Basic adjustment, headlights auto adjustment - Reset undervoltage counter - Reset crash detection signal - Rear wiper with reverse gear • Error memory • Current values <ul style="list-style-type: none"> - Fuel pump relay - Power supply - Clutch switch - brake fluid level - Light switch - Back-up lights - Ignition key position - Main beam relay - Key code - Ignition key - Status Ignition lock - Windscreen washing water level - Front fog lights relay - Rear window wiper - Front windscreen wiper - Rear window froster relay - Vehicle power supply status - Headlight washer pump relay - Orientation light potentiometer - Rain sensor - Gas pedal position - Windshield washer relay - Rear window washer relay • Actuators <ul style="list-style-type: none"> - Windshield washer system relay - Fog light - Headlights cleaning system - Relay for high-beam headlights - Rear window washer system
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

				<p>Immobilizer Access system/immobilizer 2.0</p>	<ul style="list-style-type: none"> - Adjustment: Unlocking options • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Rear top unlocking switch - Brake pedal switch - Clutch pedal switch - Number of stored keys - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Remote control: Unlocking options - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Front left door handle button - Front right door handle button - Ignition lock activation - Rear right door handle button - Rear left door handle button • Actuators <ul style="list-style-type: none"> - Unlock driver's door - Unlock front passenger's door - Unlock rear left door - Lock rear left door
				<p>Parking assisting system Park Distance Control 9.12.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Calculated distance at rear - Calculated front distance
				<p>Electrical energy management Battery management 2.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset - Reset no-load current information • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Communication with battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery status - Battery charge (SOC value) - Alternator control mode - No-load current mean value - Battery temperature - Battery charging current

VOLVO				V60 - V60 2.0T	
Year	Engine	Liters	HP	System	Functions
					• Identification

Airbag
Airbag AB 10

- **Clear errors**
 - **Error memory**
 - **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Passenger compartment temperature
 - Kilometer reading
 - Voltage belt lock driver's side
 - Voltage belt lock front passenger's side
 - Longitudinal acceleration
 - Resistance side airbag driver's side
 - Resistance side airbag front passenger's side
 - Resistance windowbag driver's side
 - Resistance windowbag passenger's side
 - Front passenger airbag control light
 - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch,
- status
- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch

Anti-block system
ESP Teves Mk25 E1

- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

- **Identification**

2010/09 - 2011/08	B4204T6	2.0	203	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp

Central electronics
Central electronics 3.0

- Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**

		<ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode

					<ul style="list-style-type: none"> - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				V60 - V60 T6 AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration

Airbag
Airbag AB 10

- Resistance side airbag driver's side
 - Resistance side airbag front passenger's side
 - Resistance windowbag driver's side
 - Resistance windowbag passenger's side
 - Front passenger airbag control light
 - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration

		<ul style="list-style-type: none"> - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear

6-gears automatic transmission TF80SC

- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request

2010/09	B6304T4	3.0	305	Central electronics Central electronics 3.0	<ul style="list-style-type: none"> - Right parking brake request - Status Handbrake • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering - Tank flap unlocking relay - Rear fog light relay - Windscreen washer system switch - Center stop lamp actuation
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- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch

			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time

					<ul style="list-style-type: none"> - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					V60 - V60 D3	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, <p>status</p> <ul style="list-style-type: none"> - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's 	

		<p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values

Electrical energy management
Battery management 3.0

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2

2010/09 - 2011/08	D5204T2	2.0	163		<ul style="list-style-type: none"> - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system 	

Central electronics
Central electronics 3.0

- **Error memory**

- **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay

Immobilizer
Access system/immobilizer 3.0

- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• Actuators

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• Identification

• Clear errors

• Error memory

• Current values

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

• Identification

Underbody/Steering
Adaptive damping system 3.0

- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation
 - Combustion air blower
 - Supplem./auxiliary heater fuel pump
 - Central electronics power supply

Parking assisting system
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Reverse gear
 - Trailer detection
 - Distance, left front, outside
 - Distance, left front, inside
 - Distance, right front, inside
 - Distance, right front, outside
 - Vehicle drive status
 - Rear left outer distance
 - Rear left inner distance

				<ul style="list-style-type: none"> - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory

Anti-block system
ESP Teves Mk25 E1

• **Current values**

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management
Battery management 3.0

• **Identification**

• **Adjustments / settings**

- Battery replacement
- Battery sensor adaptation reset

• **Current values**

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

Gear box control
6-gears automatic transmission TF80SC

- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2012/09 -</p>	<p>D5204T7</p>	<p>2.0</p>	<p>136</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch

Central electronics
Central electronics 3.0

- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right

		<ul style="list-style-type: none"> - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status

					<ul style="list-style-type: none"> - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				V60 - V60 D5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light

Airbag
Airbag AB 10

- Seat occupation sensor front passenger's side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
- Steering wheel
- Seat belt lock switch 2 row center
- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset

		<ul style="list-style-type: none"> - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification

		<ul style="list-style-type: none"> - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors

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Central electronics
Central electronics 3.0

• **Functional tests**

- Alternator voltage functional test
- Brake light/brake pedal position switch

• **Adjustments / settings**

- Start mode
- Program sensor code (activator)
- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor

- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch

Immobilizer
Access system/immobilizer 3.0

- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation

				<ul style="list-style-type: none"> - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, <p>status</p> <ul style="list-style-type: none"> - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side <p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current

				<ul style="list-style-type: none"> - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA

		<ul style="list-style-type: none"> - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2011/09	D5244T15	2.4	215		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light

Central electronics
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

		<ul style="list-style-type: none"> - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance

				<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				V60 - V60 T3	
Year	Engine	Liters	HP	System	Functions

Airbag
Airbag AB 10

- **Identification**
 - **Clear errors**
 - **Error memory**
 - **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Passenger compartment temperature
 - Kilometer reading
 - Voltage belt lock driver's side
 - Voltage belt lock front passenger's side
 - Longitudinal acceleration
 - Resistance side airbag driver's side
 - Resistance side airbag front passenger's side
 - Resistance windowbag driver's side
 - Resistance windowbag passenger's side
 - Front passenger airbag control light
 - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch,
- status
- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply

Anti-block system
ESP Teves Mk25 E1

- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2010/09 -</p>	<p>B4164T3</p>	<p>1.6</p>	<p>150</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn

Central electronics
Central electronics 3.0

- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5

				<ul style="list-style-type: none"> - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>Underbody/Steering Adaptive damping system 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation

					<ul style="list-style-type: none"> - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					V60 - V60 T4	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side 	

Airbag
Airbag AB 10

- Longitudinal acceleration
 - Resistance side airbag driver's side
 - Resistance side airbag front passenger's side
 - Resistance windowbag driver's side
 - Resistance windowbag passenger's side
 - Front passenger airbag control light
 - Seat occupation sensor front passenger's side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset

		<ul style="list-style-type: none"> - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation

				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2010/09	B4164T	1.6	180		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode

Central electronics
Central electronics 3.0

- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof

		<ul style="list-style-type: none"> - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Current values - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				V60 - V60 T5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status

Airbag
Airbag AB 10

- Status airbag front passenger's side
 - Steering wheel
 - Seat belt lock switch 2 row center
 - Resistance pre-load device 2 row center
 - Resistance pretensioner driver side
 - Resistance pretensioner front passenger side
 - Resistance pre-load device 2 row left
 - Resistance pre-load device 2 row right
 - Resistance ZK1 front airbag driver's side
 - Resistance ZK2 front airbag driver's side
 - Resistance ZK1 front airbag front passenger's side
- side
- Seat belt lock switch 2 row left
 - Seat belt lock switch 2 row right
 - 2nd row center belt buckle current
 - Passenger's airbag indicator lamp off
 - Passenger categorization
 - Deactivation switch AB BFS
 - Driver seat AB/lap belt tensioner
 - 2nd row, left belt buckle, current
 - 2nd row, right belt buckle, current
 - Airbag, passenger side
 - Safety belt detection 2 row
 - DS front belt tensioner IC resist.
 - PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber

		<ul style="list-style-type: none"> - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request

					<ul style="list-style-type: none"> - Right parking brake request - Status Handbrake
2010/09	B4204T7	2.0	241	Central electronics Central electronics 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering - Tank flap unlocking relay - Rear fog light relay - Windscreen washer system switch

- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch

Immobilizer
Access system/immobilizer 3.0

- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature

					<ul style="list-style-type: none"> - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					V60 - V60 D5 AWD	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's 	

		<p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values

Electrical energy management
Battery management 3.0

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2

					<ul style="list-style-type: none"> - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
				Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2010/09 - 2011/08	D5244T10	2.4	205		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system

Central electronics
Central electronics 3.0

- **Error memory**

- **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay

		<ul style="list-style-type: none"> - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p>

Underbody/Steering
Adaptive damping system 3.0

- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation
 - Combustion air blower
 - Supplem./auxiliary heater fuel pump
 - Central electronics power supply

Parking assisting system
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Reverse gear
 - Trailer detection
 - Distance, left front, outside
 - Distance, left front, inside
 - Distance, right front, inside
 - Distance, right front, outside
 - Vehicle drive status
 - Rear left outer distance
 - Rear left inner distance

				<ul style="list-style-type: none"> - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side side <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed

Anti-block system
ESP Teves Mk25 E1

- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**

			<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
			<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2011/09 -</p>	<p>D5244T15</p>	<p>2.4</p>	<p>215</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch

Central electronics
Central electronics 3.0

- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left

		<ul style="list-style-type: none"> - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status

					<ul style="list-style-type: none"> - Front right damper status - Rear left damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Rear right damper status • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				V60 - V60 DRIVE	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light

Airbag
Airbag AB 10

- Seat occupation sensor front passenger's side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Passeng. side airbag, deactivation switch, status
- Status airbag front passenger's side
- Steering wheel
- Seat belt lock switch 2 row center
- Resistance pre-load device 2 row center
- Resistance pretensioner driver side
- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset

		<ul style="list-style-type: none"> - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left

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Central electronics
Central electronics 3.0

- Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

Immobilizer
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage

			Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					V60 - V60 T4F	
Year	Engine	Liters	HP	System	Functions	
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, <p>status</p> <ul style="list-style-type: none"> - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side 	

Anti-block system
ESP Teves Mk25 E1

- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**

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1.6

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Central electronics
Central electronics 3.0

- Alternator voltage functional test
- Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch

- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch

Immobilizer
Access system/immobilizer 3.0

- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation

					<ul style="list-style-type: none"> - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				V60 - V60 D4	
Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, <p>status</p> <ul style="list-style-type: none"> - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side <p>side</p> <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization

		<ul style="list-style-type: none"> - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA

Battery management 3.0

- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2011/09	D5204T3	2.0	163		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump

Central electronics
Central electronics 3.0

- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering

		<ul style="list-style-type: none"> - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Airbag Airbag AB 10	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side - Resistance pretensioner front passenger side - Resistance pre-load device 2 row left - Resistance pre-load device 2 row right - Resistance ZK1 front airbag driver's side - Resistance ZK2 front airbag driver's side - Resistance ZK1 front airbag front passenger's side side <ul style="list-style-type: none"> - Seat belt lock switch 2 row left - Seat belt lock switch 2 row right - 2nd row center belt buckle current - Passenger's airbag indicator lamp off - Passenger categorization - Deactivation switch AB BFS - Driver seat AB/lap belt tensioner - 2nd row, left belt buckle, current - 2nd row, right belt buckle, current - Airbag, passenger side - Safety belt detection 2 row - DS front belt tensioner IC resist. - PS front belt tensioner IC resist.
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed

Anti-block system
ESP Teves Mk25 E1

- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left

				<ul style="list-style-type: none"> - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2012/11	D5244T15	2.4	215	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering

Central electronics
Central electronics 3.0

- Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

Immobilizer
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				V60 - V60 D4 AWD	
Year	Engine	Liters	HP	System	Functions
				<p>Airbag Airbag AB 10</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Passenger compartment temperature - Kilometer reading - Voltage belt lock driver's side - Voltage belt lock front passenger's side - Longitudinal acceleration - Resistance side airbag driver's side - Resistance side airbag front passenger's side - Resistance windowbag driver's side - Resistance windowbag passenger's side - Front passenger airbag control light - Seat occupation sensor front passenger's side <p>front</p> <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Passeng. side airbag, deactivation switch, status - Status airbag front passenger's side - Steering wheel - Seat belt lock switch 2 row center - Resistance pre-load device 2 row center - Resistance pretensioner driver side

Anti-block system
ESP Teves Mk25 E1

- Resistance pretensioner front passenger side
- Resistance pre-load device 2 row left
- Resistance pre-load device 2 row right
- Resistance ZK1 front airbag driver's side
- Resistance ZK2 front airbag driver's side
- Resistance ZK1 front airbag front passenger's side
- Seat belt lock switch 2 row left
- Seat belt lock switch 2 row right
- 2nd row center belt buckle current
- Passenger's airbag indicator lamp off
- Passenger categorization
- Deactivation switch AB BFS
- Driver seat AB/lap belt tensioner
- 2nd row, left belt buckle, current
- 2nd row, right belt buckle, current
- Airbag, passenger side
- Safety belt detection 2 row
- DS front belt tensioner IC resist.
- PS front belt tensioner IC resist.

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current

				<ul style="list-style-type: none"> - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2012/09	D5244T17	2.4	163	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after

Central electronics
Central electronics 3.0

- battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes

Immobilizer
Access system/immobilizer 3.0

- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject
- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna

				<ul style="list-style-type: none"> - Rear left antenna - Start/Stop button - Center interior antenna
			Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			Parking assisting system	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside

				Park Distance Control 3.0	<ul style="list-style-type: none"> - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO **V70 - V70 2.3i**

Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

Gear box control
5-gears automatic transmission 55-50/51SN1.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

Gear box control
5-gears automatic transmission EGS 50-42
CAN

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - kick-down switch
 - Engine revolution
 - Winter switch
 - Oil temperature sensor gear box
 - Engine status
 - Gear selection position
 - gear box oil temperature

1998/07	B5234T3	2.3	209	<ul style="list-style-type: none"> - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current
				<ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter

Central electronics
Central electronics 1.0

- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left

					<ul style="list-style-type: none"> - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
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VOLVO					V70 - V70 R 2.3 AWD	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights 	

		<ul style="list-style-type: none"> - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
		<ul style="list-style-type: none"> • Identification

1999/09
-
2000/08

B5234T3

2.3

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- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal

Central electronics
Central electronics 1.0

- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating

					<ul style="list-style-type: none"> - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
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VOLVO **V70 I - V70 I 2.0**

Year	Engine	Liters	HP	System	Functions
1997/01 - 1999/07	B5202FS	2.0	127	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2

					<ul style="list-style-type: none"> - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
1997/01 - 2000/03	B5204S	2.0	143	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO				V70 I - V70 I 2.5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification

1997/01 - 2000/03	B5252S	2.4	144	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					V70 I - V70 I 2.5 20V	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values 	

1997/01 - 2000/03	B5254S	2.4	165	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					V70 I - V70 IT-5	
Year	Engine	Liters	HP	System	Functions	
					<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch 	

1997/01 - 2000/03	B5234T3	2.3	240	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO				V70 I - V70 I 2.5 TDI	
Year	Engine	Liters	HP	System	Functions
				<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature

1997/01 - 2000/03	D5252T	2.5	140		<ul style="list-style-type: none"> - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO				V70 I - V70 I 2.0 Turbo	
Year	Engine	Liters	HP	System	Functions
				Gear box control 5-gears automatic transmission EGS 50-42 CAN	<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1

<p>1997/01 - 1999/07</p>	<p>B5204T3</p>	<p>2.0</p>	<p>226</p>	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
<p>1997/01 - 2000/03</p>	<p>B5204T</p>	<p>2.0</p>	<p>211</p>	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
					<ul style="list-style-type: none"> • Identification

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
1997/01 - 1998/07	B5204T2	2.0	180	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO					V70 I - V70 I 2.5 T AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply 	

1997/01 - 2000/03	B5254T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					V70 I - V70 I 2.3R	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution 	

1997/01 - 1998/07	B5234T4	2.3	250	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO					V70 I - V70 I 2.3	
Year	Engine	Liters	HP	System	Functions	
1997/01 - 1998/07	B5234T2	2.3	218	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU 	

VOLVO					V70 I - V70 I 2.5 T	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors 	

1997/01 - 2000/03	B5254T	2.4	193	<p>Gear box control 5-gears automatic transmission EGS 50-42 CAN</p>	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B

VOLVO					V70 I - V70 I R 2.3 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply 	

1997/08 - 1998/07	B5234T4	2.3	250	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO		V70 I - V70 I 2.5 T XC AWD			
Year	Engine	Liters	HP	System	Functions
1997/01 - 2000/03	B5254T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
					<ul style="list-style-type: none"> • Identification

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
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VOLVO				V70 I - V70 I 2.5 BI-FUEL	
Year	Engine	Liters	HP	System	Functions
1997/08 - 1999/07	GB5252S	2.4	140	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
1999/08 - 2000/03	GB5244SG	2.4	140	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3

					<ul style="list-style-type: none"> - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
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VOLVO					V70 I - V70 I 2.5 AWD	
Year	Engine	Liters	HP	System	Functions	
1999/03 - 2000/03	B5244T2	2.4	265	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU 	
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B 	

Year	Engine	Liters	HP	System	Functions
1999/05 - 2000/03	B5244S	2.4	170	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU

VOLVO					
V70 I - V70 I T-5 AWD					
Year	Engine	Liters	HP	System	Functions
1997/01 - 2000/03	B5234T6	2.3	240	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2

					<ul style="list-style-type: none"> - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO						V70 I - V70 I 2.0 AWD Turbo					
Year	Engine	Liters	HP	System		Functions					
1997/01 - 1999/07	B5204T3	2.0	226	Gear box control 5-gears automatic transmission EGS 50-42 CAN		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU 					

VOLVO						V70 I - V70 I 2.0 T 20V					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution 					

1998/08 - 2000/03	B5204T4	2.0	163	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO					V70 I - V70 I 2.5 T XC	
Year	Engine	Liters	HP	System	Functions	
1997/01 - 2000/03	B5254T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU 	

VOLVO					V70 I - V70 I 2.3 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors 	

1998/12 - 2000/03	B5234T8	2.3	250 - 265	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO					
V70 I - V70 I XC AWD					
Year	Engine	Liters	HP	System	Functions
1999/03 - 2000/03	B5244T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators

					<ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU
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VOLVO						V70 I - V70 I 2.5T					
Year	Engine	Liters	HP	System		Functions					
1999/03 - 2000/03	B5244T	2.4	193	Gear box control 5-gears automatic transmission EGS 50-42 CAN		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - kick-down switch - Engine revolution - Winter switch - Oil temperature sensor gear box - Engine status - Gear selection position - gear box oil temperature - Direct transmission Converter lockup - Brake pedal switch - Gearbox input speed - Magnetic valve transmission oil pressure - Key switch position - Gearshift solenoid valve, status 1 - Gearshift solenoid valve, status 2 - Gearbox oil pressure – set value - Switch solenoid valve SLU - Solenoid shift valve SLU current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Modulation pressure, solenoid - Switch solenoid valve SLU 					

VOLVO						V70 II - V70 II 2.0 T					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor 					

Instrument cluster
Instrument cluster 1.0

- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch

Gear box control
 5-gears automatic transmission 55-
 50/51SN2.0

- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

2000/03 - 2007/07	B5204T5	2.0	179	Central electronics Front central electronics 9.12.2	<ul style="list-style-type: none"> - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light
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- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay

Central electronics
Central electronics 1.0

- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump

		<ul style="list-style-type: none"> - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current

				Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED <p>• Actuators</p> <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
				Additional heater Auxiliary/supplementary heater 2.0	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation <p>• Actuators</p> <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				V70 II - V70 II 2.4 T	
Year	Engine	Liters	HP	System	Functions
					<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp

Instrument cluster
Instrument cluster 1.0

- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**

Gear box control
 5-gears automatic transmission 55-
 50/51SN1.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**

Central electronics
Front central electronics 9.12.2

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper

2000/03 - 2003/07	B5244T3	2.4	200	<ul style="list-style-type: none"> - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode

- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number

Central electronics 1.0

- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open
 - rear left el. window lifter closed
 - rear right el. window lifter open

				<ul style="list-style-type: none"> - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1

VOLVO

V70 II - V70 II 2.3 T5

Year	Engine	Liters	HP	System	Functions
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Instrument cluster
Instrument cluster 1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Read configuration
 - Option display configuration
 - Service interval adaptation
 - Service interval display reset
 - Activate/deactivate belt warning
 - Parking brake warning tone
- **Error memory**
- **Current values**
 - Failure lamp
 - Engine revolution
 - Warning lights
 - Kilometer reading
 - Fuel level in the tank
 - Rear fog light
 - Cooling agent temperature motor
 - Airbag signal lamp
 - Cruise control, control light
 - Oil pressure control lamp
 - Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal

Gear box control
 5-gears automatic transmission 55-
 50/51SN1.0

- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic

- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window

2000/03
-
2004/07

B5234T3

2.3

250

Central electronics
Front central electronics 9.12.2

- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right

- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model

Central electronics
Central electronics 1.0

- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold

		<ul style="list-style-type: none"> - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset

				<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
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VOLVO					V70 II - V70 II XC AWD	
Year	Engine	Liters	HP	System	Functions	
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light 	

		<ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing

Central electronics
Front central electronics 9.12.2

- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring

<p>2000/09 - 2002/07</p>	<p>B5244T3</p>	<p>2.4</p>	<p>200</p>		<ul style="list-style-type: none"> - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed
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Central electronics
Central electronics 1.0

- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status

- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Battery voltage

				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1

VOLVO				V70 II - V70 II 2.4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp

Instrument cluster
Instrument cluster 1.0

- Engine revolution
- Warning lights
- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left

		<ul style="list-style-type: none"> - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1

- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking

2000/03
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Central electronics
Front central electronics 9.12.2

- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay

- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter

Central electronics
Central electronics 1.0

- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left

				<ul style="list-style-type: none"> - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage

				<ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			<p>Underbody/Steering Adap. suspension sys. 2.0</p>	
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light

Instrument cluster
Instrument cluster 1.0

- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

2003/04 - 2006/07	B5244S6	2.4	170	Central electronics Front central electronics 9.12.2	<ul style="list-style-type: none"> - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light
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- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay

Central electronics
Central electronics 1.0

- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump

		<ul style="list-style-type: none"> - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current

				<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					V70 II - V70 II 2.5D	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor 	

Instrument cluster
Instrument cluster 1.0

- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**

Central electronics
Front central electronics 9.12.2

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper

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2001/07

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2.5

140

- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status

Central electronics
Central electronics 1.0

- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open
 - rear left el. window lifter closed

				<ul style="list-style-type: none"> - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1

VOLVO

V70 II - V70 II 2.4D

Year	Engine	Liters	HP	System	Functions
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			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
			<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal

Gear box control
 5-gears automatic transmission 55-
 50/51SN1.0

- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic

- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module

• **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window

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Central electronics
Front central electronics 9.12.2

- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right

- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model

Central electronics
Central electronics 1.0

- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold

				<ul style="list-style-type: none"> - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
		<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
		<p>Steering wheel rotation angle sensor</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply

			Steering angle sensor 2.1	<ul style="list-style-type: none"> - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act. current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration

Instrument cluster
Instrument cluster 1.0

- Service interval adaptation
- Service interval display reset
- Activate/deactivate belt warning
- Parking brake warning tone
- **Error memory**
- **Current values**
 - Failure lamp
 - Engine revolution
 - Warning lights
 - Kilometer reading
 - Fuel level in the tank
 - Rear fog light
 - Cooling agent temperature motor
 - Airbag signal lamp
 - Cruise control, control light
 - Oil pressure control lamp
 - Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

		<ul style="list-style-type: none"> • Actuators - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions - Start gear indicator mode - Start test mode • Error memory • Current values - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset - Transm. oil change interval reset

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value
 - Gear ratio set value
 - Start release by selector lever module

- **Actuators**

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**

- **Clear errors**

- **Functional tests**

- Alternator voltage functional test

- **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay

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Central electronics
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- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump

- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal

Central electronics
Central electronics 1.0

- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2

		<ul style="list-style-type: none"> - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
		<ul style="list-style-type: none"> • Identification

				<ul style="list-style-type: none"> • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			<p>Underbody/Steering Adap. suspension sys. 2.0</p>	
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values

Instrument cluster
Instrument cluster 1.0

- Failure lamp
- Engine revolution
- Warning lights
- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right

- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value

					<ul style="list-style-type: none"> - Set value, solenoid valve, torque conv. lock-up - Converter bridging solenoid valve actual pressure - Geartronic - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
<p>2006/08 - 2007/07</p>	<p>D5244T7</p>	<p>2.4</p>	<p>126</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal

Central electronics
Front central electronics 9.12.2

- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights

		<ul style="list-style-type: none"> - Relay 4 terminal 15 • Actuators - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset • Error memory • Current values - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation

					<ul style="list-style-type: none"> - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					
V70 II - V70 II 2.5 BI-FUEL CNG					
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status

		<ul style="list-style-type: none"> - Parking brake, control light • Actuators - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - ABS test • Error memory • Current values - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions - Start gear indicator mode - Start test mode • Error memory • Current values - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction

Gear box control
5-gears automatic transmission 55-50/51SN1.0

- kick-down switch
- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed
- **Actuators**
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
- Start gear indicator mode
- Start test mode
- **Error memory**
- **Current values**
- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear

- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system

Central electronics
Front central electronics 9.12.2

- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

Central electronics
Central electronics 1.0

- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light

		<ul style="list-style-type: none"> - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation

					<ul style="list-style-type: none"> - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO						V70 II - V70 II 2.5 BI-FUEL LPG					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light 					

				<ul style="list-style-type: none"> • Actuators - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
		<p>Anti-block system ABS Teves Mk25 VER2</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - ABS test • Error memory • Current values - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions - Start gear indicator mode - Start test mode • Error memory • Current values - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning

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• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper

- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

- **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received

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- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open

				<ul style="list-style-type: none"> - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch

					<ul style="list-style-type: none"> - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					V70 II - V70 II 2.5 T AWD	
Year	Engine	Liters	HP	System	Functions	
				<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators 	

- Warning lights
- Failure lamp
- Tank reserve lamp triggering
- Gong
- Preheat control light
- Generator lamp
- Hi-beam lights, control light
- Rear fog lights control light
- Trailer turn signal, control light
- Airbag control light
- All displays and control lights
- ABS control light
- Brakes control light
- Parking brake, control light
- ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2

Gear box control
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- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Battery voltage
- Driving speed
- Gear lever AT position
- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2

Gear box control
5-gears automatic transmission 55-50/51SN2.0

- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**

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• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer

- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status

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- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open
 - rear left el. window lifter closed

					<ul style="list-style-type: none"> - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply

VOLVO					V70 II - V70 II 2.4D AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light 	

Instrument cluster
Instrument cluster 1.0

- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- Start gear indicator mode
- Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch

Gear box control
 5-gears automatic transmission 55-
 50/51SN2.0

- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on

Central electronics
Front central electronics 9.12.2

- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring

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- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open
 - rear left el. window lifter closed
 - rear right el. window lifter open
 - rear right el. window lifter closed
 - Relay for parking lights

- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status

Central electronics
Central electronics 1.0

- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay

				<ul style="list-style-type: none"> - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act. current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp

					<ul style="list-style-type: none"> - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED <p>• Actuators</p> <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation <p>• Actuators</p> <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					V70 II - V70 II R 2.5 T AWD	
Year	Engine	Liters	HP	System	Functions	
					<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light 	

Instrument cluster
Instrument cluster 1.0

- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- Start gear indicator mode
- Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch

Gear box control
 5-gears automatic transmission 55-
 50/51SN2.0

- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on

- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring

Central electronics
Front central electronics 9.12.2

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- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open
 - rear left el. window lifter closed
 - rear right el. window lifter open
 - rear right el. window lifter closed
 - Relay for parking lights

- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status

Central electronics
Central electronics 1.0

- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay

		<ul style="list-style-type: none"> - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
<p>Underbody/Steering Adap. suspension sys. 2.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp

				<ul style="list-style-type: none"> - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED <p>• Actuators</p> <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation <p>• Actuators</p> <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				V70 II - V70 II 2.5 T	
Year	Engine	Liters	HP	System	Functions
					<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light

Instrument cluster
Instrument cluster 1.0

- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- Start gear indicator mode
- Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5
- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter

- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor

Central electronics
Front central electronics 9.12.2

2004/04
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2007/07

B5254T2

2.5

210

- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open
 - rear left el. window lifter closed
 - rear right el. window lifter open
 - rear right el. window lifter closed
 - Relay for parking lights
 - Relay for low-beam headlights

- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status

Central electronics
Central electronics 1.0

- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay

		<ul style="list-style-type: none"> - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp

					<ul style="list-style-type: none"> - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED <p>• Actuators</p> <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation <p>• Actuators</p> <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				V70 II - V70 II 2.4 T5	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster	<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light

Instrument cluster 1.0

- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature

Gear box control
 5-gears automatic transmission 55-
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- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter

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- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor

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- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open
 - rear left el. window lifter closed
 - rear right el. window lifter open
 - rear right el. window lifter closed
 - Relay for parking lights
 - Relay for low-beam headlights

- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status

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- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay

				<ul style="list-style-type: none"> - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Underbody/Steering Adap. suspension sys. 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1

					<ul style="list-style-type: none"> - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED <p>• Actuators</p> <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			Additional heater Auxiliary/supplementary heater 2.0		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation <p>• Actuators</p> <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					V70 II - V70 II D5	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<p>• Identification</p> <p>• Clear errors</p> <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light 	

		<ul style="list-style-type: none"> - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode

Gear box control
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- Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value
 - Gear ratio set value
 - Start release by selector lever module
- **Actuators**
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3

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				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status

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- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights

		<ul style="list-style-type: none"> - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing

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- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring

	<ul style="list-style-type: none"> - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right

				<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				V70 II - V70 II D5 AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading

Instrument cluster
Instrument cluster 1.0

- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic

2005/12 - 2006/07	D5244T3	2.4	185	<ul style="list-style-type: none"> - Geartronic - Geartronic - - Winter mode - Gear ratio actual value - Gear ratio set value - Start release by selector lever module • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter

Central electronics
Front central electronics 9.12.2

- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left

		<ul style="list-style-type: none"> - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED

				<ul style="list-style-type: none"> • Actuators - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
			<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
			<p>Instrument cluster Instrument cluster 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp

			<ul style="list-style-type: none"> - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
		<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
			<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50

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Central electronics
Front central electronics 9.12.2

- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor

				<ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 <p>• Actuators</p> <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
		<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply

				<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
				<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					V70 II - V70 II 2.4 T AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration 	

Instrument cluster
Instrument cluster 1.0

- Service interval adaptation
- Service interval display reset
- Activate/deactivate belt warning
- Parking brake warning tone
- **Error memory**
- **Current values**
 - Failure lamp
 - Engine revolution
 - Warning lights
 - Kilometer reading
 - Fuel level in the tank
 - Rear fog light
 - Cooling agent temperature motor
 - Airbag signal lamp
 - Cruise control, control light
 - Oil pressure control lamp
 - Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

		<ul style="list-style-type: none"> • Actuators - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
	<p>Gear box control 5-gears automatic transmission 55-50/51SN1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Solenoid valve 1/2 - Power supply - Engine revolution - Solenoid valve 3 - Winter switch - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - system power supply - gear box oil temperature - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Ignition - Torque limitation - Gear lever position - Gearbox input speed - Solenoid valve 4/5 - Solenoid switch valve 5 - Ignition key position - Engine torque - Torque reduction on changing gear - Gear ratio actual value - Gear ratio set value - Brake CU signal, vehicle speed • Actuators <ul style="list-style-type: none"> - regul. Pressure solenoid valve 2 - regul. pressure solenoid valve 2 - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - Solenoid switch valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status

2000/09 - 2003/07	B5244T3	2.4	200	Central electronics Front central electronics 9.12.2	<ul style="list-style-type: none"> - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed
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- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights

Central electronics
Central electronics 1.0

- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights

		<ul style="list-style-type: none"> - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Underbody/Steering Adap. suspension sys. 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation

					<ul style="list-style-type: none"> - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
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VOLVO					V70 II - V70 II 2.3	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light 	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test 	

Anti-block system
ABS Teves Mk25 VER2

- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position

- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window

2000/03
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2004/07

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2.3

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Central electronics
Front central electronics 9.12.2

- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right

- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model

Central electronics
Central electronics 1.0

- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold

		<ul style="list-style-type: none"> - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset • Error memory • Current values

				<p>Underbody/Steering Adap. suspension sys. 2.0</p> <ul style="list-style-type: none"> - Battery voltage - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Switch illumination - ADVANCED program lamp - COMFORT program lamp - Sensor power supply 1 - Sensor power supply 2 - Longitudinal acceleration sensor front left - Longitudinal acceleration sensor front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Gearbox shift mode, switch - Sports mode LED • Actuators <ul style="list-style-type: none"> - Front left damper valve 1 - Front right damper valve 1 - Rear left damper valve 1 - Rear right damper valve 1
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VOLVO				V70 III - V70 III 3.2	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset

		<ul style="list-style-type: none"> - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2

				<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
			Underbody/Steering Electro hydraulic servo steering 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply

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238

Central electronics
Central electronics 3.0

- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch

				<ul style="list-style-type: none"> - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supple./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors

					<ul style="list-style-type: none"> - Front Park Distance Control - Rear Park Distance Control • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
			Anti-block system ESP Teves Mk25 E1		
			Electrical energy management Battery management 3.0		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset

		<ul style="list-style-type: none"> - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left
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Central electronics
Central electronics 3.0

- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +

		<ul style="list-style-type: none"> - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance

				Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors

Anti-block system
ESP Teves Mk25 E1

- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30

Gear box control
6-gears automatic transmission TF80SC

- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuations during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input
- Parking brake status, left

				<ul style="list-style-type: none"> - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2007/08 - 2010/07	B5254T6	2.5	200	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering

Central electronics
Central electronics 3.0

- Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

Immobilizer
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset

		<ul style="list-style-type: none"> - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status

	<ul style="list-style-type: none"> - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake

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Central electronics
Central electronics 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor

- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch

Immobilizer
Access system/immobilizer 3.0

- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply

					<ul style="list-style-type: none"> - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				V70 III - V70 III T6 AWD	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset

		<ul style="list-style-type: none"> - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch

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Central electronics
Central electronics 3.0

- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering

		<ul style="list-style-type: none"> - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left

				<ul style="list-style-type: none"> - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Underbody/Steering Adaptive damping system 3.0</p>	
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification

Anti-block system
ESP Teves Mk25 E1

- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection

		<ul style="list-style-type: none"> - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed

				<ul style="list-style-type: none"> - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front
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Central electronics
Central electronics 3.0

- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light

		<ul style="list-style-type: none"> - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current

					<ul style="list-style-type: none"> - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				V70 III - V70 III 2.4D	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings

Anti-block system
ESP Teves Mk25 E1

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch

Gear box control
6-gears automatic transmission TF80SC

- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor

				<ul style="list-style-type: none"> - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2007/08 - 2009/07</p>	<p>D5244T5</p>	<p>2.4</p>	<p>163</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering

Central electronics
Central electronics 3.0

- Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**

					<ul style="list-style-type: none"> • Current values - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<p>Immobilizer Access system/immobilizer 3.0</p>	
				<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status

			Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset

		<ul style="list-style-type: none"> - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5

			<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level

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Central electronics
Central electronics 3.0

- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering

		<ul style="list-style-type: none"> - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction

Gear box control
6-gears automatic transmission TF80SC

- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**

<p>2007/08 - 2009/07</p>	<p>D5244T4</p>	<p>2.4</p>	<p>185</p>	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination

Central electronics
Central electronics 3.0

- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper

		<ul style="list-style-type: none"> - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature

		<ul style="list-style-type: none"> - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
<p>Electrical energy management Battery management 3.0</p>		<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30

Gear box control
6-gears automatic transmission TF80SC

- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuators during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input
- Parking brake status, left

				<ul style="list-style-type: none"> - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2009/08 - 2011/07</p>	<p>D5244T10</p>	<p>2.4</p>	<p>205</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering

Central electronics
Central electronics 3.0

- Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

Immobilizer
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset

		<ul style="list-style-type: none"> - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment

	<ul style="list-style-type: none"> - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Release parking brake - Parking brake apply • Adjustments / settings - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake

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Central electronics
Central electronics 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor

- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch

Immobilizer
Access system/immobilizer 3.0

- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply

					<ul style="list-style-type: none"> - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					V70 III - V70 III 3.2 AWD	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset 	

				<ul style="list-style-type: none"> - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
			<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level

<p>2007/08 - 2010/07</p>	<p>B6324S</p>	<p>3.2</p>	<p>238</p>	<p>Central electronics Central electronics 3.0</p>	<ul style="list-style-type: none"> - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering - Tank flap unlocking relay - Rear fog light relay - Windscreen washer system switch - Center stop lamp actuation - Fog light switch - Rain sensor - Wiper switch - Light sensor - Rear fog lights switch - Washer fluid level monitoring - Backup lights - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery voltage monitoring - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering
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				<ul style="list-style-type: none"> - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage

				<ul style="list-style-type: none"> - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Underbody/Steering Adaptive damping system 3.0</p>	
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors

Anti-block system
ESP Teves Mk25 E1

- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection

Gear box control
6-gears automatic transmission TF80SC

- Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed

				<ul style="list-style-type: none"> - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading
2010/08	B6324S5	3.2	243	

Central electronics
Central electronics 3.0

- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light

		<ul style="list-style-type: none"> - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act. current - Rear left damper valve act. current

					<ul style="list-style-type: none"> - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					V70 III - V70 III D5 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings 	

Anti-block system
ESP Teves Mk25 E1

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch

Gear box control
6-gears automatic transmission TF80SC

- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light

				<ul style="list-style-type: none"> - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2007/10 - 2009/07	D5244T4	2.4	185	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering

Central electronics
Central electronics 3.0

- Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**

<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump

				<ul style="list-style-type: none"> - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset

		<ul style="list-style-type: none"> - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal

		<ul style="list-style-type: none"> - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test

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Central electronics
Central electronics 3.0

- Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring

- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left

<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower

				<ul style="list-style-type: none"> - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature

		<ul style="list-style-type: none"> - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve

		<ul style="list-style-type: none"> - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear

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Central electronics
Central electronics 3.0

- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA

	<ul style="list-style-type: none"> - Battery voltage monitoring - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna

				<ul style="list-style-type: none"> - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO				V70 III - V70 III 2.0 F Flexifuel	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current

		<ul style="list-style-type: none"> - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change

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Central electronics
Central electronics 3.0

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value

- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna

Immobilizer
Access system/immobilizer 3.0

		<ul style="list-style-type: none"> - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act. current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
	<p>Parking assisting system</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside

			Park Distance Control 3.0	<ul style="list-style-type: none"> - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO **V70 III - V70 III 2.0B**

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - rear right tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset

Electrical energy management
Battery management 3.0

• **Current values**

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current

• **Actuators**

- Gear shift solenoid valve 1

		<ul style="list-style-type: none"> - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions

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Central electronics
Central electronics 3.0

- Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position

- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• Actuators

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

Immobilizer
Access system/immobilizer 3.0

• Identification

• Clear errors

• Error memory

• Current values

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation
 - Combustion air blower
 - Supple./auxiliary heater fuel pump
 - Central electronics power supply

Parking assisting system
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Reverse gear
 - Trailer detection
 - Distance, left front, outside
 - Distance, left front, inside
 - Distance, right front, inside
 - Distance, right front, outside
 - Vehicle drive status
 - Rear left outer distance

					<ul style="list-style-type: none"> - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO	V70 III - V70 III 2.0D
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions

Gear box control
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**

2007/10 - 2010/07	D4204T	2.0	136	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake <hr/> <ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay
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Central electronics
Central electronics 3.0

- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1

		<ul style="list-style-type: none"> - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply

					<ul style="list-style-type: none"> - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					V70 III - V70 III 2.5 FT Flexifuel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values 	

Anti-block system
ESP Teves Mk25 E1

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1

		<ul style="list-style-type: none"> - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test

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Central electronics
Central electronics 3.0

- Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring

- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left

<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump

					- Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					
V70 III - V70 III 1.6D DRIVe					
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber

			<ul style="list-style-type: none"> - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
		<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
		<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program

		<ul style="list-style-type: none"> - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator)

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Central electronics
Central electronics 3.0

- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA

Immobilizer
Access system/immobilizer 3.0

- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject
- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button

	<ul style="list-style-type: none"> - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
	<ul style="list-style-type: none"> • Identification • Clear errors

					<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO	V70 III - V70 III 2.5 FT Fexifuel
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature

		<ul style="list-style-type: none"> - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current

		<ul style="list-style-type: none"> - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear

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Central electronics
Central electronics 3.0

- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA

	<ul style="list-style-type: none"> - Battery voltage monitoring - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna

		<ul style="list-style-type: none"> - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supple./auxiliary heater fuel pump - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO	V70 III - V70 III 2.0 T
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation <ul style="list-style-type: none"> - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification

Electrical energy management
Battery management 3.0

- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current

		<ul style="list-style-type: none"> - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change

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Central electronics
Central electronics 3.0

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value

- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

Immobilizer
Access system/immobilizer 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna

				<ul style="list-style-type: none"> - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside

				Park Distance Control 3.0	<ul style="list-style-type: none"> - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO				V70 III - V70 III D3	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values

Electrical energy management
Battery management 3.0

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2

		<ul style="list-style-type: none"> - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system

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Central electronics
Central electronics 3.0

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay

		<ul style="list-style-type: none"> - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p>

Underbody/Steering
Adaptive damping system 3.0

- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation
 - Combustion air blower
 - Supplem./auxiliary heater fuel pump
 - Central electronics power supply

Parking assisting system
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Reverse gear
 - Trailer detection
 - Distance, left front, outside
 - Distance, left front, inside
 - Distance, right front, inside
 - Distance, right front, outside
 - Vehicle drive status
 - Rear left outer distance
 - Rear left inner distance

				<ul style="list-style-type: none"> - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA

		<ul style="list-style-type: none"> - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation

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Central electronics
Central electronics 3.0

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right

- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Immobilizer
Access system/immobilizer 3.0

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation
 - Combustion air blower
 - Supplem./auxiliary heater fuel pump
 - Central electronics power supply

Parking assisting system
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Reverse gear
 - Trailer detection
 - Distance, left front, outside
 - Distance, left front, inside
 - Distance, right front, inside
 - Distance, right front, outside
 - Vehicle drive status

					<ul style="list-style-type: none"> - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO					V70 III - V70 III T5	
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status

Electrical energy management
Battery management 3.0

- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1

		<ul style="list-style-type: none"> - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values

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Central electronics
Central electronics 3.0

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch

				<ul style="list-style-type: none"> - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

Underbody/Steering
Adaptive damping system 3.0

• **Current values**

- Car level (horizontality) sensor output: rear left
- Car level (horizontality) sensor output: rear right
- Car level (horizontality) sensor output: front left
- Electronic control unit supply voltage
- Control unit, Voltage sensor 1
- Control unit, Voltage sensor 2
- Front left damper valve resistance
- Front right damper valve resistance
- Rear left damper valve resistance
- Rear right damper valve resistance
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve act. current
- Vehicle level sensor, front right
- Front left damper valve actuation
- Front right damper valve actuation
- Rear left damper valve actuation
- Rear right damper valve actuation
- Damper mode
- Front right acceleration sensor power supply
- Front left acceleration sensor power supply
- Rear left acceleration sensor power supply
- Front left damper status
- Front right damper status
- Rear left damper status
- Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Fuel warming up
- Total run
- Coolant temperature
- Battery voltage
- Passenger compartment temperature
- Starter
- Operating status
- Additional cooling fluid pump
- Glow plugs control
- Ambient temperature
- Auxiliary/supplementary heater operating time
- Auxiliary/supplementary heater heating time
- Electronic control unit power supply
- Glow plug
- Combustion air blower actuation
- Combustion air blower
- Supplem./auxiliary heater fuel pump
- Central electronics power supply

Parking assisting system
Park Distance Control 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Power supply
- Reverse gear
- Trailer detection
- Distance, left front, outside
- Distance, left front, inside
- Distance, right front, inside
- Distance, right front, outside
- Vehicle drive status
- Rear left outer distance
- Rear left inner distance
- Rear right outer distance
- Rear right inner distance

- Distance sensors
- Front Park Distance Control
- Rear Park Distance Control

VOLVO				V70 III - V70 III T4	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
				Electrical energy management	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA

Battery management 3.0

- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level

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				<ul style="list-style-type: none"> - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left

			<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
		<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supple./auxiliary heater fuel pump - Central electronics power supply
		<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA

				<ul style="list-style-type: none"> - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
		<p>Gear box control 6-gears automatic transmission TF80SC</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

				<p>Underbody/Steering Electro hydraulic servo steering 3.0</p> <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
			<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light
2011/08	D4162T	1.6	114	

Central electronics
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

Immobilizer
Access system/immobilizer 3.0

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- Car level (horizontality) sensor output: rear left
- Car level (horizontality) sensor output: rear right
- Car level (horizontality) sensor output: front left
- Electronic control unit supply voltage
- Control unit, Voltage sensor 1
- Control unit, Voltage sensor 2
- Front left damper valve resistance

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO

V70 III - V70 III T4F

Year	Engine	Liters	HP	System	Functions
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Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value

		<ul style="list-style-type: none"> - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights

				<p>Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2011/08</p>	<p>B4164T2</p>	<p>1.6</p>	<p>180</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left

Central electronics
Central electronics 3.0

- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status

		<ul style="list-style-type: none"> - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current

				Adaptive damping system 3.0	<ul style="list-style-type: none"> - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				V70 III - V70 III 2.0 D4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test

Anti-block system
ESP Teves Mk25 E1

- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**

Gear box control
6-gears automatic transmission TF80SC

- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor

					<ul style="list-style-type: none"> - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal
2011/08	D5204T3	2.0	163		

Central electronics
Central electronics 3.0

- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2

		<ul style="list-style-type: none"> - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act. current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right

					<ul style="list-style-type: none"> - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				V70 III - V70 III 2.0 T5	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position

Anti-block system
ESP Teves Mk25 E1

- adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset

Gear box control
6-gears automatic transmission TF80SC

- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2012/08 -</p>	<p>B5204T9</p>	<p>2.0</p>	<p>214</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn

Central electronics
Central electronics 3.0

- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5

		<ul style="list-style-type: none"> - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation

					<ul style="list-style-type: none"> - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					V70 III - V70 III D4 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor 	

Anti-block system
ESP Teves Mk25 E1

- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**

Gear box control
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2012/08 -</p>	<p>D5244T17</p>	<p>2.4</p>	<p>163</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light

Central electronics
Central electronics 3.0

- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2

				<ul style="list-style-type: none"> - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply

					<ul style="list-style-type: none"> - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				XC60 - XC60 D5 AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed

Anti-block system
ESP Teves Mk25 E1

- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2

		<ul style="list-style-type: none"> - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current <p>• Actuators</p> <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Functional tests</p> <ul style="list-style-type: none"> - Release parking brake - Parking brake apply <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<p>• Identification</p> <p>• Clear errors</p> <p>• Functional tests</p> <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch <p>• Adjustments / settings</p> <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation <p>• Special functions</p> <ul style="list-style-type: none"> - Tire monitoring system <p>• Error memory</p>

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Central electronics
Central electronics 3.0

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch

			<ul style="list-style-type: none"> - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p>

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Current values - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance

				<ul style="list-style-type: none"> - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA

		<ul style="list-style-type: none"> - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

2009/08 - 2011/07	D5244T10	2.4	205	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light

Central electronics
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

		<ul style="list-style-type: none"> - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration

Anti-block system
ESP Teves Mk25 E1

- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Error memory**

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch

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Central electronics
Central electronics 3.0

- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay

				<ul style="list-style-type: none"> - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature

Gear box control
6-gears automatic transmission TF80SC

- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuations during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input
- Parking brake status, left
- Parking brake status, right
- Clutch pedal position
- Rear outer friction pad wearout sensor
- Parking brake, control light
- Actuation counter
- Left parking brake request
- Right parking brake request
- Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**

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Central electronics
Central electronics 3.0

- Alternator voltage functional test
- Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch

- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left

<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act. current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump

				<ul style="list-style-type: none"> - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature

		<ul style="list-style-type: none"> - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic

				<ul style="list-style-type: none"> - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
		<p>Parking brake Electrical parking brake 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch

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Central electronics
Central electronics 3.0

- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering

				<ul style="list-style-type: none"> - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature

Gear box control
6-gears automatic transmission TF80SC

- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**

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Central electronics
Central electronics 3.0

- Alternator voltage functional test
- Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear
 - Reset CE power supply adaptation after battery change
 - Reset BMS power supply adaptation after battery change
 - Read out alarm sources
 - Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch

- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch

<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump

				<ul style="list-style-type: none"> - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature

Electrical energy management
Battery management 3.0

- Rear right brake disc temperature
- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic

		<ul style="list-style-type: none"> - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Underbody/Steering Electro hydraulic servo steering 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Vehicle driving speed - Battery voltage - Warning lights - Steering wheel rotational speed - Current consumption pump motor - Pump motor nominal speed - Actual speed, pump motor - Output stage temperature - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change

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Central electronics
Central electronics 3.0

- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption

	<ul style="list-style-type: none"> - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna

		<ul style="list-style-type: none"> - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
	Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO	XC60 - XC60 2.4D DRIVe
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Clear errors

Gear box control
6-gears automatic transmission TF80SC

- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor

				<p>Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2009/08 - 2010/07</p>	<p>D5244T14</p>	<p>2.4</p>	<p>175</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light

Central electronics
Central electronics 3.0

- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof

				<ul style="list-style-type: none"> - Brake lights - Side light/dipped beam/brake light - Ignition key eject
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				XC60 - XC60 3.2 AWD	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature

		<ul style="list-style-type: none"> - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30

Gear box control
6-gears automatic transmission TF80SC

- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1
- Brake pads replacement, step 2
- **Error memory**
- **Current values**
- Power supply
- Actuations during vehicle operation
- Inclination sensor
- Parking brake button
- Left control motor, current input
- Right control motor, current input
- Parking brake status, left
- Parking brake status, right
- Clutch pedal position
- Rear outer friction pad wearout sensor
- Parking brake, control light
- Actuation counter
- Left parking brake request
- Right parking brake request
- Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- Brake light/brake pedal position switch
- **Adjustments / settings**
- Start mode

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Central electronics
Central electronics 3.0

- Program sensor code (activator)
- Sun roof initialization
- Reset crash detection signal
- Rear wiper with reverse gear
- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA

	<ul style="list-style-type: none"> - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery voltage monitoring - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys

		<ul style="list-style-type: none"> - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
		<ul style="list-style-type: none"> • Identification

				<p>Parking assisting system Park Distance Control 3.0</p> <ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p> <ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature 	
				<ul style="list-style-type: none"> • Identification

Electrical energy management
Battery management 3.0

- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current

		<ul style="list-style-type: none"> - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light

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Central electronics
Central electronics 3.0

- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply

		<ul style="list-style-type: none"> - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings

Anti-block system
ESP Teves Mk25 E1

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**

Gear box control
6-gears automatic transmission TF80SC

- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button

				<ul style="list-style-type: none"> - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2010/08	B6324S4	3.2	238	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light

Central electronics
Central electronics 3.0

- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights

				<ul style="list-style-type: none"> - Side light/dipped beam/brake light - Ignition key eject
			<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				XC60 - XC60 3.2	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed

	<ul style="list-style-type: none"> - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic -

		<ul style="list-style-type: none"> - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch

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Central electronics
Central electronics 3.0

- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering

				<ul style="list-style-type: none"> - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
				<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance

				<p>Underbody/Steering Adaptive damping system 3.0</p> <ul style="list-style-type: none"> - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test

Anti-block system
ESP Teves Mk25 E1

- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**

Gear box control
6-gears automatic transmission TF80SC

- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2010/08 -</p>	<p>B6324S4</p>	<p>3.2</p>	<p>238</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode

Central electronics
Central electronics 3.0

- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof

		<ul style="list-style-type: none"> - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Current values - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				XC60 - XC60 2.0T	
Year	Engine	Liters	HP	System	Functions
				<p>Anti-block system</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - ESP test • Adjustments / settings - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions - Bleed • Error memory • Current values - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed

ESP Teves Mk25 E1

- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -

		<ul style="list-style-type: none"> - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch

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Central electronics
Central electronics 3.0

- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering

		<ul style="list-style-type: none"> - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance

			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
				Electrical energy management Battery management 3.0	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset

		<ul style="list-style-type: none"> - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal

2010/08 - 2011/07	D5204T2	2.0	163	Central electronics Central electronics 3.0	<ul style="list-style-type: none"> - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering - Tank flap unlocking relay - Rear fog light relay - Windscreen washer system switch - Center stop lamp actuation - Fog light switch - Rain sensor - Wiper switch - Light sensor - Rear fog lights switch - Washer fluid level monitoring - Backup lights - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery voltage monitoring - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2
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		<ul style="list-style-type: none"> - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current

				<ul style="list-style-type: none"> - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor

Anti-block system
ESP Teves Mk25 E1

- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**

Gear box control
6-gears automatic transmission TF80SC

- Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2011/08 - 2012/07</p>	<p>D5204T3</p>	<p>2.0</p>	<p>163</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light

Central electronics
Central electronics 3.0

- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2

		<ul style="list-style-type: none"> - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply

					<ul style="list-style-type: none"> - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			Additional heater Auxiliary/supplementary heater 3.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			Parking assisting system Park Distance Control 3.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					XC60 - XC60 T5	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed 	

Anti-block system
ESP Teves Mk25 E1

- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature

		<ul style="list-style-type: none"> - Control unit temperature - El.hydraulic power steering status
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch

2010/08

B4204T7

2.0

240

Central electronics
Central electronics 3.0

- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3

		<ul style="list-style-type: none"> - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation

					<ul style="list-style-type: none"> - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					XC60 - XC60 D4 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position 	

Anti-block system
ESP Teves Mk25 E1

- adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration

Gear box control
6-gears automatic transmission TF80SC

- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

- **Identification**

2011/08 -	D5244T17	2.4	163	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp

Central electronics
Central electronics 3.0

- Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**

		<ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode

					<ul style="list-style-type: none"> - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				XC60 - XC60 D3	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions

Anti-block system
ESP Teves Mk25 E1

- Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode

Gear box control
6-gears automatic transmission TF80SC

- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Vehicle driving speed
 - Battery voltage
 - Warning lights
 - Steering wheel rotational speed
 - Current consumption pump motor
 - Pump motor nominal speed
 - Actual speed, pump motor
 - Output stage temperature
 - Control unit temperature
 - El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2012/08 -</p>	<p>D5204T7</p>	<p>2.0</p>	<p>136</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light

Central electronics
Central electronics 3.0

- Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2

		<ul style="list-style-type: none"> - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply

					<ul style="list-style-type: none"> - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supple./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				XC60 - XC60 D4	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values

Anti-block system
ESP Teves Mk25 E1

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed
- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position

Gear box control
6-gears automatic transmission TF80SC

- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
- Gear shift solenoid valve 1
- Gear shift solenoid valve 2
- Torque converter lock-up clutch solenoid valve
- Pressure-regulation magnetic valve 1
- Pressure-regulation magnetic valve 2
- Pressure-regulation magnetic valve 3
- Pressure control solenoid valve 4
- Pressure control magnetic valve 5

Underbody/Steering
Electro hydraulic servo steering 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
- Power supply
- Vehicle driving speed
- Battery voltage
- Warning lights
- Steering wheel rotational speed
- Current consumption pump motor
- Pump motor nominal speed
- Actual speed, pump motor
- Output stage temperature
- Control unit temperature
- El.hydraulic power steering status

- **Identification**
- **Clear errors**
- **Functional tests**
- Release parking brake
- Parking brake apply
- **Adjustments / settings**
- Brake pads replacement, step 1

				Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2012/08	D5204T3	2.0	163		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch

Central electronics
Central electronics 3.0

- Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right

		<ul style="list-style-type: none"> - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status

				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					XC70 I - XC70 I 2.5T AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp 	

Instrument cluster
Instrument cluster 1.0

- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**

Gear box control
 5-gears automatic transmission 55-50/51SN1.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test

2002/08
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2007/07

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2.5

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210

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received

Central electronics
Front central electronics 9.12.2

- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light
 - rear left el. window lifter open

- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights

Central electronics
Central electronics 1.0

- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights

					<ul style="list-style-type: none"> - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply

VOLVO					XC70 I - XC70 I 2.4D AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone 	

Instrument cluster
Instrument cluster 1.0

- **Error memory**
- **Current values**
 - Failure lamp
 - Engine revolution
 - Warning lights
 - Kilometer reading
 - Fuel level in the tank
 - Rear fog light
 - Cooling agent temperature motor
 - Airbag signal lamp
 - Cruise control, control light
 - Oil pressure control lamp
 - Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left

- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value

- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
- Alternator voltage functional test
- **Adjustments / settings**
- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal

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Central electronics
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- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay

- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing

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- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring

	<ul style="list-style-type: none"> - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A

					- Current level LED circuit B
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO XC70 I - XC70 I 2.3T AWD					
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal

				<ul style="list-style-type: none"> - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
		<p>Anti-block system ABS Teves Mk25 VER2</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Accelerator pedal position

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					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15

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Central electronics
Central electronics 1.0

- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply

	<ul style="list-style-type: none"> - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1

					<ul style="list-style-type: none"> - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Additional heater Auxiliary/supplementary heater 2.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO					XC70 I - XC70 I D5 AWD	
Year	Engine	Liters	HP	System	Functions	
				Instrument cluster Instrument cluster 1.0		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights

		<ul style="list-style-type: none"> - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode - Start test mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Battery voltage - Driving speed - Gear lever AT position - kick-down switch

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Functional tests**

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- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

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- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light

					<ul style="list-style-type: none"> - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				Additional heater Auxiliary/supplementary heater 2.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal

VOLVO				XC70 I - XC70 I 2.4T AWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light

Instrument cluster
Instrument cluster 1.0

- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value
 - Gear ratio set value

				<ul style="list-style-type: none"> - Start release by selector lever module
<p>2004/08 - 2007/07</p>	<p>B5244T4</p>	<p>2.4</p>	<p>200 - 200</p>	<ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5 • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay

Central electronics
Front central electronics 9.12.2

- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump

		<ul style="list-style-type: none"> - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
	<p>Steering wheel rotation angle sensor Steering angle sensor 1.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
	<p>Steering wheel rotation angle sensor Steering angle sensor 2.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
	<p>Additional heater Auxiliary/supplementary heater 2.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Pump, hot water - Actuators power supply - Operating hour meter - Flame sensor - Ignition status - Additional heater - Glow plug, PWM signal - Combustion air blower actual speed

					<ul style="list-style-type: none"> - Combustion air blower PWM signal - Combustion air blower specified speed - Electric fuel pump frequency - Glow plug actuation • Actuators <ul style="list-style-type: none"> - Glow plug - Additional heater - Pump, hot water - Combustion air blower PWM signal
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VOLVO XC70 II - XC70 II D5 AWD					
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset

Gear box control
6-gears automatic transmission TF80SC

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input

				<ul style="list-style-type: none"> - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2007/08 - 2009/07	D5244T4	2.4	185	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing

Central electronics
Central electronics 3.0

- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light

			<p>Immobilizer Access system/immobilizer 3.0</p>	<p>- Ignition key eject</p> <ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset

		<ul style="list-style-type: none"> - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status

				<ul style="list-style-type: none"> - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
		<p>Parking brake Electrical parking brake 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Release parking brake - Parking brake apply • Adjustments / settings - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values - Power supply - Actuations during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change

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205

Central electronics
Central electronics 3.0

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value

	<ul style="list-style-type: none"> - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna

				<ul style="list-style-type: none"> - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside

			Park Distance Control 3.0	<ul style="list-style-type: none"> - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
				<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage

Electrical energy management
Battery management 3.0

- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3

				<ul style="list-style-type: none"> - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
			Parking brake Electrical parking brake 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam
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Central electronics
Central electronics 3.0

- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4

				<ul style="list-style-type: none"> - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
		<p>Immobilizer Access system/immobilizer 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
		<p>Underbody/Steering Adaptive damping system 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation

					<ul style="list-style-type: none"> - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					XC70 II - XC70 II 3.2 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position 	

Anti-block system
ESP Teves Mk25 E1

- adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration

Gear box control
6-gears automatic transmission TF80SC

- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left

				<ul style="list-style-type: none"> - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2007/08 - 2010/07</p>	<p>B6324S</p>	<p>3.2</p>	<p>238</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering

Central electronics
Central electronics 3.0

- Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

Immobilizer
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontal) sensor output: rear left
 - Car level (horizontal) sensor output: rear right
 - Car level (horizontal) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset

	<ul style="list-style-type: none"> - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status

		<ul style="list-style-type: none"> - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Release parking brake - Parking brake apply • Adjustments / settings - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change

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Central electronics
Central electronics 3.0

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value

- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna

Immobilizer
Access system/immobilizer 3.0

				<ul style="list-style-type: none"> - Rear left antenna - Start/Stop button - Center interior antenna
			<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside

				Park Distance Control 3.0	<ul style="list-style-type: none"> - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO XC70 II - XC70 II 2.4D AWD

Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset

Gear box control
6-gears automatic transmission TF80SC

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input

				<ul style="list-style-type: none"> - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2007/08 - 2009/07	D5244T5	2.4	163	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing

Central electronics
Central electronics 3.0

- Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

Immobilizer
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature

			<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset

		<ul style="list-style-type: none"> - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed

		<ul style="list-style-type: none"> - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Release parking brake - Parking brake apply • Adjustments / settings - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after

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Central electronics
Central electronics 3.0

battery change

- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes

	<ul style="list-style-type: none"> - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button

				<ul style="list-style-type: none"> - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
			Underbody/Steering Adaptive damping system 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO	XC70 II - XC70 II T6 AWD
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Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
					<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset

Electrical energy management
Battery management 3.0

• **Current values**

- Battery voltage
- Battery charging status
- Battery sensor
- Alternator, charging voltage
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 40-79mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery monitoring sensor status
- Battery operating time since monitoring reset
- Battery temperature
- Total no-load current mean value
- Battery status detection
- Battery charge/discharge current

Gear box control
6-gears automatic transmission TF80SC

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current

• **Actuators**

- Gear shift solenoid valve 1

		<ul style="list-style-type: none"> - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left

2008/08 - 2010/07	B6304T2	3.0	286	Central electronics Central electronics 3.0	<ul style="list-style-type: none"> - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering - Tank flap unlocking relay - Rear fog light relay - Windscreen washer system switch - Center stop lamp actuation - Fog light switch - Rain sensor - Wiper switch - Light sensor - Rear fog lights switch - Washer fluid level monitoring - Backup lights - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery voltage monitoring - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status
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		<ul style="list-style-type: none"> - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering • Actuators <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current

			Adaptive damping system 3.0	<ul style="list-style-type: none"> - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
			Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position

Anti-block system
ESP Teves Mk25 E1

- adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration

Gear box control
6-gears automatic transmission TF80SC

- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left

				<ul style="list-style-type: none"> - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2010/08	B6304T4	3.0	304	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering

Central electronics
Central electronics 3.0

- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes
- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering
- **Actuators**
 - Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

Immobilizer
Access system/immobilizer 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - stop lights switch
 - Clutch pedal switch
 - Rear left door exterior handle contact
 - Rear right door exterior handle contact
 - Front driver side door lock switch
 - Front passen. side door lock switch
 - Rear left door lock switch
 - Rear right door lock switch
 - Ext. door handle electronics contact, front left
 - Ext. door handle electronics contact, front right
 - Number of registered master keys
 - Number of registered slave keys
 - Front left door handle button
 - Front right door handle button
 - Rear right door handle button
 - Rear lid exterior antenna
 - Front interior antenna
 - Rear interior antenna
 - Rear left door handle button
 - Rear right antenna
 - Rear left antenna
 - Start/Stop button
 - Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage

			Additional heater Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
			Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					XC70 II - XC70 II 2.4D DRIVE	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle 	

		<ul style="list-style-type: none"> - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch

Gear box control
6-gears automatic transmission TF80SC

- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light
 - Actuation counter
 - Left parking brake request
 - Right parking brake request
 - Status Handbrake

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
 - Brake light/brake pedal position switch
- **Adjustments / settings**
 - Start mode
 - Program sensor code (activator)
 - Sun roof initialization
 - Reset crash detection signal
 - Rear wiper with reverse gear

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Central electronics
Central electronics 3.0

- Reset CE power supply adaptation after battery change
- Reset BMS power supply adaptation after battery change
- Read out alarm sources
- Instrument cluster illumination day/night mode adaptation
- **Special functions**
 - Tire monitoring system
- **Error memory**
- **Current values**
 - Power supply
 - Accelerator pedal position
 - electric fuel pump
 - brake fluid level
 - Top contact switch
 - Rear top contact switch
 - Brake pedal switch
 - Light switch
 - High beam light
 - Short lights, left
 - Short lights, right
 - Side marker light front left
 - Side-marker lamp, right front
 - Kilometer reading
 - Intensity of instrument illumination
 - Fuel fill level signal
 - Clutch pedal switch
 - Changeover switch Full-/Low beam
 - Signal horn
 - Fog light control lamp
 - Rear fog lights control lamp
 - Main beam relay
 - Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA

	<ul style="list-style-type: none"> - Battery voltage monitoring - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position - Windshield washer relay - Driver's door contact switch - Front passenger door contact switch - Driver side rear door contact switch - Pass.side rear door contact switch - 1st alarm triggering - 2nd alarm triggering - 3rd alarm triggering - 4th alarm triggering - 5th alarm triggering - Indicator/hazard warning lights relay - Steering column, power supply - Cruise control/ACC button + - Cruise control/ACC button - - System power mode status - Rear left side marker light - Rear right side marker light - Operating time in days with alarm 1 - Operating time in days with alarm 2 - Operating time in days with alarm 3 - Operating time in days with alarm 4 - Operating time in days with alarm 5 - Time: Fifth last alarm triggering <p>• Actuators</p> <ul style="list-style-type: none"> - Fuel pump relay - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
<p>Immobilizer Access system/immobilizer 3.0</p>	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna

		<ul style="list-style-type: none"> - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supple./auxiliary heater fuel pump - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO				XC70 II - XC70 II D3 DRIVe	
Year	Engine	Liters	HP	System	Functions
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature

	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions

2010/08 - 2011/12	D5204T2	2.0	163	<p>Central electronics Central electronics 3.0</p>	<ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering - Tank flap unlocking relay - Rear fog light relay - Windscreen washer system switch - Center stop lamp actuation - Fog light switch - Rain sensor - Wiper switch - Light sensor - Rear fog lights switch - Washer fluid level monitoring - Backup lights - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery voltage monitoring - Battery power consumption - Operating time in minutes - No-load current mean value - Age of the vehicle in days - Sun sensor left - Sun sensor right - Clutch pedal position
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- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• Actuators

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

Immobilizer
Access system/immobilizer 3.0

• Identification

• Clear errors

• Error memory

• Current values

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater
Auxiliary/supplementary heater 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump
 - Glow plugs control
 - Ambient temperature
 - Auxiliary/supplementary heater operating time
 - Auxiliary/supplementary heater heating time
 - Electronic control unit power supply
 - Glow plug
 - Combustion air blower actuation
 - Combustion air blower
 - Supplem./auxiliary heater fuel pump
 - Central electronics power supply

Parking assisting system
Park Distance Control 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Power supply
 - Reverse gear
 - Trailer detection
 - Distance, left front, outside
 - Distance, left front, inside
 - Distance, right front, inside
 - Distance, right front, outside
 - Vehicle drive status
 - Rear left outer distance
 - Rear left inner distance

				<ul style="list-style-type: none"> - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
			<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
			<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA

		<ul style="list-style-type: none"> - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators <ul style="list-style-type: none"> - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
		<ul style="list-style-type: none"> • Identification • Clear errors

				<p>Parking brake Electrical parking brake 3.0</p>	<ul style="list-style-type: none"> • Functional tests <ul style="list-style-type: none"> - Release parking brake - Parking brake apply • Adjustments / settings <ul style="list-style-type: none"> - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
<p>2011/08 -</p>	<p>D5204T3</p>	<p>2.0</p>	<p>163</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay

Central electronics
Central electronics 3.0

- Windscreen wiper relay
 - Stop light
 - Cruise control CRUISE switch
 - Tempomat CANCEL switch
 - Tempomat ACCEL/RESUME switch
 - Indicators switch
 - Reg. number illumination
 - Emergency lights switch
 - Front fog lights relay
 - Working mode
 - Right turn light
 - Left turn light
 - ACC button for distance reducing
 - ACC button for distance increasing
 - Time: Last alarm triggering
 - Time: Last but 1 alarm triggering
 - Time: Third last alarm triggering
 - Time: Fourth last alarm triggering
 - Tank flap unlocking relay
 - Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay

		<ul style="list-style-type: none"> - Wiper Level 1 - Wiper Level 2 - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - Rear screen wiper - rear left indicator - rear right indicator - Open the sunroof - Close the sunroof - Brake lights - Side light/dipped beam/brake light - Ignition key eject
	<p>Immobilizer Access system/immobilizer 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - stop lights switch - Clutch pedal switch - Rear left door exterior handle contact - Rear right door exterior handle contact - Front driver side door lock switch - Front passen. side door lock switch - Rear left door lock switch - Rear right door lock switch - Ext. door handle electronics contact, front left - Ext. door handle electronics contact, front right - Number of registered master keys - Number of registered slave keys - Front left door handle button - Front right door handle button - Rear right door handle button - Rear lid exterior antenna - Front interior antenna - Rear interior antenna - Rear left door handle button - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontal) sensor output: rear left - Car level (horizontal) sensor output: rear right - Car level (horizontal) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply

					<ul style="list-style-type: none"> - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
				<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				<p>Parking assisting system Park Distance Control 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO				XC70 II - XC70 II 3.2 2WD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed

Anti-block system
ESP Teves Mk25 E1

- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Electrical energy management
Battery management 3.0

- **Identification**
- **Adjustments / settings**
 - Battery replacement
 - Battery sensor adaptation reset
- **Current values**
 - Battery voltage
 - Battery charging status
 - Battery sensor
 - Alternator, charging voltage
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 40-79mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery monitoring sensor status
 - Battery operating time since monitoring reset
 - Battery temperature
 - Total no-load current mean value
 - Battery status detection
 - Battery charge/discharge current

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**

Gear box control
6-gears automatic transmission TF80SC

- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

Parking brake
Electrical parking brake 3.0

- **Identification**
- **Clear errors**
- **Functional tests**
 - Release parking brake
 - Parking brake apply
- **Adjustments / settings**
 - Brake pads replacement, step 1
 - Brake pads replacement, step 2
- **Error memory**
- **Current values**
 - Power supply
 - Actuators during vehicle operation
 - Inclination sensor
 - Parking brake button
 - Left control motor, current input
 - Right control motor, current input
 - Parking brake status, left
 - Parking brake status, right
 - Clutch pedal position
 - Rear outer friction pad wearout sensor
 - Parking brake, control light

				<ul style="list-style-type: none"> - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
2010/08	B6324S5	3.2	243	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after battery change - Read out alarm sources - Instrument cluster illumination day/night mode adaptation • Special functions <ul style="list-style-type: none"> - Tire monitoring system • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Accelerator pedal position - electric fuel pump - brake fluid level - Top contact switch - Rear top contact switch - Brake pedal switch - Light switch - High beam light - Short lights, left - Short lights, right - Side marker light front left - Side-marker lamp, right front - Kilometer reading - Intensity of instrument illumination - Fuel fill level signal - Clutch pedal switch - Changeover switch Full-/Low beam - Signal horn - Fog light control lamp - Rear fog lights control lamp - Main beam relay - Windscreen wiper relay - Stop light - Cruise control CRUISE switch - Tempomat CANCEL switch - Tempomat ACCEL/RESUME switch - Indicators switch - Reg. number illumination - Emergency lights switch - Front fog lights relay - Working mode - Right turn light - Left turn light - ACC button for distance reducing - ACC button for distance increasing - Time: Last alarm triggering - Time: Last but 1 alarm triggering - Time: Third last alarm triggering - Time: Fourth last alarm triggering - Tank flap unlocking relay

Central electronics
Central electronics 3.0

- Rear fog light relay
 - Windscreen washer system switch
 - Center stop lamp actuation
 - Fog light switch
 - Rain sensor
 - Wiper switch
 - Light sensor
 - Rear fog lights switch
 - Washer fluid level monitoring
 - Backup lights
 - Number of no-load current events 0-9 mA
 - Number of no-load current events 10-19mA
 - Number of no-load current events 20-29mA
 - Number of no-load current events 30-39mA
 - Number of no-load current events 80-119 mA
 - Number of no-load current events >120 mA
 - Battery voltage monitoring
 - Battery power consumption
 - Operating time in minutes
 - No-load current mean value
 - Age of the vehicle in days
 - Sun sensor left
 - Sun sensor right
 - Clutch pedal position
 - Windshield washer relay
 - Driver's door contact switch
 - Front passenger door contact switch
 - Driver side rear door contact switch
 - Pass.side rear door contact switch
 - 1st alarm triggering
 - 2nd alarm triggering
 - 3rd alarm triggering
 - 4th alarm triggering
 - 5th alarm triggering
 - Indicator/hazard warning lights relay
 - Steering column, power supply
 - Cruise control/ACC button +
 - Cruise control/ACC button -
 - System power mode status
 - Rear left side marker light
 - Rear right side marker light
 - Operating time in days with alarm 1
 - Operating time in days with alarm 2
 - Operating time in days with alarm 3
 - Operating time in days with alarm 4
 - Operating time in days with alarm 5
 - Time: Fifth last alarm triggering
- **Actuators**
- Fuel pump relay
 - Wiper Level 1
 - Wiper Level 2
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - Rear screen wiper
 - rear left indicator
 - rear right indicator
 - Open the sunroof
 - Close the sunroof
 - Brake lights
 - Side light/dipped beam/brake light
 - Ignition key eject

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**

Immobilizer
Access system/immobilizer 3.0

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button
- Rear right antenna
- Rear left antenna
- Start/Stop button
- Center interior antenna

Underbody/Steering
Adaptive damping system 3.0

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Car level (horizontality) sensor output: rear left
 - Car level (horizontality) sensor output: rear right
 - Car level (horizontality) sensor output: front left
 - Electronic control unit supply voltage
 - Control unit, Voltage sensor 1
 - Control unit, Voltage sensor 2
 - Front left damper valve resistance
 - Front right damper valve resistance
 - Rear left damper valve resistance
 - Rear right damper valve resistance
 - Front left damper valve act. current
 - Front right damper valve act. current
 - Rear left damper valve act. current
 - Rear right damper valve act. current
 - Vehicle level sensor, front right
 - Front left damper valve actuation
 - Front right damper valve actuation
 - Rear left damper valve actuation
 - Rear right damper valve actuation
 - Damper mode
 - Front right acceleration sensor power supply
 - Front left acceleration sensor power supply
 - Rear left acceleration sensor power supply
 - Front left damper status
 - Front right damper status
 - Rear left damper status
 - Rear right damper status

Additional heater

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Fuel warming up
 - Total run
 - Coolant temperature
 - Battery voltage
 - Passenger compartment temperature
 - Starter
 - Operating status
 - Additional cooling fluid pump

				Auxiliary/supplementary heater 3.0	<ul style="list-style-type: none"> - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control

VOLVO					XC70 II - XC70 II D3 AWD	
Year	Engine	Liters	HP	System	Functions	
				Anti-block system ESP Teves Mk25 E1	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset 	

		<ul style="list-style-type: none"> - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Electrical energy management Battery management 3.0</p>	<ul style="list-style-type: none"> • Identification • Adjustments / settings <ul style="list-style-type: none"> - Battery replacement - Battery sensor adaptation reset • Current values <ul style="list-style-type: none"> - Battery voltage - Battery charging status - Battery sensor - Alternator, charging voltage - Number of no-load current events 0-9 mA - Number of no-load current events 10-19mA - Number of no-load current events 20-29mA - Number of no-load current events 30-39mA - Number of no-load current events 40-79mA - Number of no-load current events 80-119 mA - Number of no-load current events >120 mA - Battery monitoring sensor status - Battery operating time since monitoring reset - Battery temperature - Total no-load current mean value - Battery status detection - Battery charge/discharge current
	<p>Gear box control 6-gears automatic transmission TF80SC</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature - Transmission control, torque reduction - kick-down switch - Power supply - Engine revolution - Passenger compartment temperature - The ambient temperature - gear box oil temperature - transmission ratio - battery voltage, terminal 30 - Solenoid valve: direct gear direct gear - Start permission - Brake pedal switch - Distance - Gear lever position - Needed gear - Gearbox input speed

		<ul style="list-style-type: none"> - MIL-Status - Engine actual moment - Transmission output speed - Gear box transmission identification - Driving speed sensor signal - Gearshift solenoid 1 - Gearshift solenoid 2 - Transmission selector lever position P - Gear position in manual program - Fault message - Solenoid valve 4 actuation current - Solenoid valve 5 actuation current - Torque converter lock-up clutch solenoid valve - Geartronic - Geartronic - - Solenoid valve 1, actual current - Solenoid valve 2, actual current - Solenoid valve 3, actual current • Actuators - Gear shift solenoid valve 1 - Gear shift solenoid valve 2 - Torque converter lock-up clutch solenoid valve - Pressure-regulation magnetic valve 1 - Pressure-regulation magnetic valve 2 - Pressure-regulation magnetic valve 3 - Pressure control solenoid valve 4 - Pressure control magnetic valve 5
<p>Parking brake Electrical parking brake 3.0</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Release parking brake - Parking brake apply • Adjustments / settings - Brake pads replacement, step 1 - Brake pads replacement, step 2 • Error memory • Current values - Power supply - Actuators during vehicle operation - Inclination sensor - Parking brake button - Left control motor, current input - Right control motor, current input - Parking brake status, left - Parking brake status, right - Clutch pedal position - Rear outer friction pad wearout sensor - Parking brake, control light - Actuation counter - Left parking brake request - Right parking brake request - Status Handbrake
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests - Alternator voltage functional test - Brake light/brake pedal position switch • Adjustments / settings - Start mode - Program sensor code (activator) - Sun roof initialization - Reset crash detection signal - Rear wiper with reverse gear - Reset CE power supply adaptation after battery change - Reset BMS power supply adaptation after

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Central electronics
Central electronics 3.0

battery change

- Read out alarm sources
- Instrument cluster illumination day/night mode

adaptation

• **Special functions**

- Tire monitoring system

• **Error memory**

• **Current values**

- Power supply
- Accelerator pedal position
- electric fuel pump
- brake fluid level
- Top contact switch
- Rear top contact switch
- Brake pedal switch
- Light switch
- High beam light
- Short lights, left
- Short lights, right
- Side marker light front left
- Side-marker lamp, right front
- Kilometer reading
- Intensity of instrument illumination
- Fuel fill level signal
- Clutch pedal switch
- Changeover switch Full-/Low beam
- Signal horn
- Fog light control lamp
- Rear fog lights control lamp
- Main beam relay
- Windscreen wiper relay
- Stop light
- Cruise control CRUISE switch
- Tempomat CANCEL switch
- Tempomat ACCEL/RESUME switch
- Indicators switch
- Reg. number illumination
- Emergency lights switch
- Front fog lights relay
- Working mode
- Right turn light
- Left turn light
- ACC button for distance reducing
- ACC button for distance increasing
- Time: Last alarm triggering
- Time: Last but 1 alarm triggering
- Time: Third last alarm triggering
- Time: Fourth last alarm triggering
- Tank flap unlocking relay
- Rear fog light relay
- Windscreen washer system switch
- Center stop lamp actuation
- Fog light switch
- Rain sensor
- Wiper switch
- Light sensor
- Rear fog lights switch
- Washer fluid level monitoring
- Backup lights
- Number of no-load current events 0-9 mA
- Number of no-load current events 10-19mA
- Number of no-load current events 20-29mA
- Number of no-load current events 30-39mA
- Number of no-load current events 80-119 mA
- Number of no-load current events >120 mA
- Battery voltage monitoring
- Battery power consumption
- Operating time in minutes

Immobilizer
Access system/immobilizer 3.0

- No-load current mean value
- Age of the vehicle in days
- Sun sensor left
- Sun sensor right
- Clutch pedal position
- Windshield washer relay
- Driver's door contact switch
- Front passenger door contact switch
- Driver side rear door contact switch
- Pass.side rear door contact switch
- 1st alarm triggering
- 2nd alarm triggering
- 3rd alarm triggering
- 4th alarm triggering
- 5th alarm triggering
- Indicator/hazard warning lights relay
- Steering column, power supply
- Cruise control/ACC button +
- Cruise control/ACC button -
- System power mode status
- Rear left side marker light
- Rear right side marker light
- Operating time in days with alarm 1
- Operating time in days with alarm 2
- Operating time in days with alarm 3
- Operating time in days with alarm 4
- Operating time in days with alarm 5
- Time: Fifth last alarm triggering

• **Actuators**

- Fuel pump relay
- Wiper Level 1
- Wiper Level 2
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- Rear screen wiper
- rear left indicator
- rear right indicator
- Open the sunroof
- Close the sunroof
- Brake lights
- Side light/dipped beam/brake light
- Ignition key eject

• **Identification**

• **Clear errors**

• **Error memory**

• **Current values**

- stop lights switch
- Clutch pedal switch
- Rear left door exterior handle contact
- Rear right door exterior handle contact
- Front driver side door lock switch
- Front passen. side door lock switch
- Rear left door lock switch
- Rear right door lock switch
- Ext. door handle electronics contact, front left
- Ext. door handle electronics contact, front right
- Number of registered master keys
- Number of registered slave keys
- Front left door handle button
- Front right door handle button
- Rear right door handle button
- Rear lid exterior antenna
- Front interior antenna
- Rear interior antenna
- Rear left door handle button

		<ul style="list-style-type: none"> - Rear right antenna - Rear left antenna - Start/Stop button - Center interior antenna
	<p>Underbody/Steering Adaptive damping system 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Car level (horizontality) sensor output: rear left - Car level (horizontality) sensor output: rear right - Car level (horizontality) sensor output: front left - Electronic control unit supply voltage - Control unit, Voltage sensor 1 - Control unit, Voltage sensor 2 - Front left damper valve resistance - Front right damper valve resistance - Rear left damper valve resistance - Rear right damper valve resistance - Front left damper valve act. current - Front right damper valve act. current - Rear left damper valve act. current - Rear right damper valve act. current - Vehicle level sensor, front right - Front left damper valve actuation - Front right damper valve actuation - Rear left damper valve actuation - Rear right damper valve actuation - Damper mode - Front right acceleration sensor power supply - Front left acceleration sensor power supply - Rear left acceleration sensor power supply - Front left damper status - Front right damper status - Rear left damper status - Rear right damper status
	<p>Additional heater Auxiliary/supplementary heater 3.0</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Fuel warming up - Total run - Coolant temperature - Battery voltage - Passenger compartment temperature - Starter - Operating status - Additional cooling fluid pump - Glow plugs control - Ambient temperature - Auxiliary/supplementary heater operating time - Auxiliary/supplementary heater heating time - Electronic control unit power supply - Glow plug - Combustion air blower actuation - Combustion air blower - Supplem./auxiliary heater fuel pump - Central electronics power supply
		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Reverse gear - Trailer detection - Distance, left front, outside

				Parking assisting system Park Distance Control 3.0	<ul style="list-style-type: none"> - Distance, left front, inside - Distance, right front, inside - Distance, right front, outside - Vehicle drive status - Rear left outer distance - Rear left inner distance - Rear right outer distance - Rear right inner distance - Distance sensors - Front Park Distance Control - Rear Park Distance Control
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VOLVO	XC90 - XC90 2.5T AWD
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Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
					<ul style="list-style-type: none"> • Identification • Clear errors

Anti-block system
ESP Teves Mk25 E1

- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature

- Rear left brake disc temperature
- Rear right brake disc temperature

• **Actuators**

- Inlet valve: front right front right
- Inlet valve: front left front left
- Exhaust valve: front left front left
- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

Gear box control
5-gears automatic transmission 55-50/51SN1.0

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission adaptation

• **Special functions**

- Start gear indicator mode
- Start test mode

• **Error memory**

• **Current values**

- Vehicle driving speed
- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Solenoid valve 1/2
- Power supply
- Engine revolution
- Solenoid valve 3
- Winter switch
- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- system power supply
- gear box oil temperature
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Ignition
- Torque limitation
- Gear lever position
- Gearbox input speed
- Solenoid valve 4/5
- Solenoid switch valve 5
- Ignition key position
- Engine torque
- Torque reduction on changing gear
- Gear ratio actual value
- Gear ratio set value
- Brake CU signal, vehicle speed

• **Actuators**

- regul. Pressure solenoid valve 2
- regul. pressure solenoid valve 2
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- Solenoid switch valve 5

• **Identification**

• **Clear errors**

• **Adjustments / settings**

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value

2002/10 - 2012/10	B5254T2	2.5	210	<ul style="list-style-type: none"> - Gear ratio set value - Start release by selector lever module • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay

Central electronics
Front central electronics 9.12.2

- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump

- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)

Central electronics
Central electronics 1.0

- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code

				<ul style="list-style-type: none"> - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
		Steering wheel rotation angle sensor Steering angle sensor 1.0		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
		Steering wheel rotation angle sensor Steering angle sensor 2.1		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle

VOLVO				XC90 - XC90 T6 AWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
					<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed

Anti-block system
ESP Teves Mk25 E1

- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left

- Pump motor

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode

- Seat heating adjustment

- Blower motor, run-on

- Reset undervoltage counter

- Reset crash detection signal

- Adjustment: Lighting on leaving vehicle

- Adjustment: One-touch turn signal indication

- Fuel tank cap locking

- Illumination system

- Daytime driving light adjustment

- Rear wiper with reverse gear

- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed

- Total run

- Contact switch

- Fuel pump relay

- start signal, terminal 50

- Cruise control

- Terminal 30

- Immobilizer

- engine control unit ignition blocking

- Terminal 15

- Start permission

- Output stage group A

- Output stage group B

- Function windscreen washing

- Function washing rear window washing

- End position windshield wiper

- Tank filling door

- Stationary heater/ventilation activation

- Supply voltage term.30

- Switch identification

- Vehicle model

- Transponder

- Signal horn

- Vehicle information (VIN)

- Transponder communication

- Generator, L-Signal

- Headlight level control signal

- Left xenon lamp signal

- Right xenon lamp signal

- Power supply relay

- Automatic transmission power supply

- Selector lever lock relay

- Relay starter

- Rear left window

- Rear right window

- Childproof lock relay

- Main beam relay

- Low-beam relay

- Stand light relay

- Relay, daytime running lights

- Front left door status

- Front right door status

- Rear left door status

- Rear right door status

- Hatchback status

- Front left door locking

- Front right door locking

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Central electronics
Front central electronics 9.12.2

- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn

- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter

Central electronics
Central electronics 1.0

- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left

					<ul style="list-style-type: none"> - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply

VOLVO					XC90 - XC90 D5 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors 	

Instrument cluster
Instrument cluster 1.0

- **Adjustments / settings**

- Read configuration
- Option display configuration
- Service interval adaptation
- Service interval display reset
- Activate/deactivate belt warning
- Parking brake warning tone

- **Error memory**

- **Current values**

- Failure lamp
- Engine revolution
- Warning lights
- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light

- **Actuators**

- Warning lights
- Failure lamp
- Tank reserve lamp triggering
- Gong
- Preheat control light
- Generator lamp
- Hi-beam lights, control light
- Rear fog lights control light
- Trailer turn signal, control light
- Airbag control light
- All displays and control lights
- ABS control light
- Brakes control light
- Parking brake, control light
- ASR/ESP control light

- **Identification**

- **Clear errors**

- **Functional tests**

- ESP test

- **Adjustments / settings**

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor

- **Special functions**

- Bleed

- **Error memory**

- **Current values**

- Vehicle driving speed
- Total run
- Battery voltage
- Power supply
- stop lights switch
- front left tire speed

Anti-block system
ESP Teves Mk25 E1

- front right tire speed
- rare right tire speed
- rear left tire speed
- The ambient temperature
- pressure sensor
- Lateral acceleration sensor
- Driving wheels angle
- reflexive angle
- Steering wheel angle offset
- Longitudinal acceleration
- Yaw rate sensor offset
- Brake pressure sensor offset
- Longitudinal acceleration sensor offset
- Lateral acceleration sensor offset
- Stored longitudinal acceleration sensor offset
- Stored lateral acceleration sensor offset
- Stored yaw rate sensor offset
- Stored steering angle sensor offset
- Stored brake pressure sensor offset
- Brake booster vacuum chamber
- Brake booster working chamber
- LED STC/DSTC button
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value
 - Gear ratio set value
 - Start release by selector lever module
- **Actuators**

2003/01 - 2006/07	D5244T	2.4	163	<ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5 <hr/> <ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status
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Central electronics
Front central electronics 9.12.2

- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay

- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal

Central electronics
Central electronics 1.0

- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay

				<ul style="list-style-type: none"> - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - Battery voltage - Driving wheels angle - Steering angle sensor signal voltage A1 - Steering angle sensor signal voltage A2 - Status of LED circuit A - Status of LED circuit B - Status, steering angle sensor signal A1 - Status, steering angle sensor signal A2 - Status, steering angle sensor signal A3 - Status, steering angle sensor signal A4 - Status, steering angle sensor signal B1 - Status, steering angle sensor signal B2 - Status, steering angle sensor signal B3 - Status, steering angle sensor signal B4 - Current level LED circuit A - Current level LED circuit B
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				<ul style="list-style-type: none"> • Identification • Clear errors

Instrument cluster
Instrument cluster 1.0

- **Adjustments / settings**

- Read configuration
- Option display configuration
- Service interval adaptation
- Service interval display reset
- Activate/deactivate belt warning
- Parking brake warning tone

- **Error memory**

- **Current values**

- Failure lamp
- Engine revolution
- Warning lights
- Kilometer reading
- Fuel level in the tank
- Rear fog light
- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light

- **Actuators**

- Warning lights
- Failure lamp
- Tank reserve lamp triggering
- Gong
- Preheat control light
- Generator lamp
- Hi-beam lights, control light
- Rear fog lights control light
- Trailer turn signal, control light
- Airbag control light
- All displays and control lights
- ABS control light
- Brakes control light
- Parking brake, control light
- ASR/ESP control light

- **Identification**

- **Clear errors**

- **Functional tests**

- ABS test

- **Error memory**

- **Current values**

- Vehicle driving speed
- Battery voltage
- stop lights switch
- front left tire speed
- front right tire speed
- rear right tire speed
- rear left tire speed
- Brake pedal position sensor
- Voltage at CEM
- Vehicle acceleration
- Front left wheel, speed signal
- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature

Anti-block system
ABS Teves Mk25 VER2

- Rear left brake disc temperature
- Rear right brake disc temperature

• **Actuators**

- Inlet valve: front right front right
- Inlet valve: front left front left
- Exhaust valve: front left front left
- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay

				<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status - Rear right door status - Hatchback status - Front left door locking - Front right door locking - Rear left door locking - Rear right door locking - Airbag triggering signal - Alarm LED - Xenon lamp status - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right
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- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder

Central electronics
Central electronics 1.0

- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status

				<ul style="list-style-type: none"> - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor

Instrument cluster
Instrument cluster 1.0

- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ESP Teves Mk25 E1

- **Identification**
- **Clear errors**
- **Functional tests**
 - ESP test
- **Adjustments / settings**
 - Brake pressure sensor zero pos. calibration
 - Lateral acceleration sensor zero position adjustment
 - Longitudinal acceleration sensor zero position adaptation
 - Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset

		<ul style="list-style-type: none"> - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
	<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch

<p>2007/10 - 2011/07</p>	<p>D5244T5</p>	<p>2.4</p>	<p>163</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status - Rear right door status - Hatchback status - Front left door locking - Front right door locking - Rear left door locking - Rear right door locking - Airbag triggering signal - Alarm LED - Xenon lamp status - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side
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- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter

Central electronics
Central electronics 1.0

- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor

- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

- **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights

				<ul style="list-style-type: none"> - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
			Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings

Anti-block system
ESP Teves Mk25 E1

- Brake pressure sensor zero pos. calibration
- Lateral acceleration sensor zero position adjustment
- Longitudinal acceleration sensor zero position adaptation
- Adaptation, steering wheel angle sensor
- **Special functions**
 - Bleed
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Battery voltage
 - Power supply
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - The ambient temperature
 - pressure sensor
 - Lateral acceleration sensor
 - Driving wheels angle
 - reflexive angle
 - Steering wheel angle offset
 - Longitudinal acceleration
 - Yaw rate sensor offset
 - Brake pressure sensor offset
 - Longitudinal acceleration sensor offset
 - Lateral acceleration sensor offset
 - Stored longitudinal acceleration sensor offset
 - Stored lateral acceleration sensor offset
 - Stored yaw rate sensor offset
 - Stored steering angle sensor offset
 - Stored brake pressure sensor offset
 - Brake booster vacuum chamber
 - Brake booster working chamber
 - LED STC/DSTC button
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right

- Inlet valve: front left front left
- Exhaust valve: front left front left
- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay

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Central electronics
Front central electronics 9.12.2

- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump

- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal

Central electronics
Central electronics 1.0

- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2

					<ul style="list-style-type: none"> - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply

VOLVO				XC90 - XC90 2.5T FWD	
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light

Instrument cluster
Instrument cluster 1.0

- Cooling agent temperature motor
- Airbag signal lamp
- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**

Gear box control
5-gears automatic transmission 55-
50/51SN1.0

- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Solenoid valve 1/2
 - Power supply
 - Engine revolution
 - Solenoid valve 3
 - Winter switch
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - system power supply
 - gear box oil temperature
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Ignition
 - Torque limitation
 - Gear lever position
 - Gearbox input speed
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Ignition key position
 - Engine torque
 - Torque reduction on changing gear
 - Gear ratio actual value
 - Gear ratio set value
 - Brake CU signal, vehicle speed
- **Actuators**
 - regul. Pressure solenoid valve 2
 - regul. pressure solenoid valve 2
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Solenoid valve: direct gear direct gear
 - Solenoid switch valve 5

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset
 - Transmission position sensor calibration
 - Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- kick-down switch
- Solenoid valve 1/2
- Engine revolution
- Solenoid valve 3
- stop lights switch
- Winter switch
- Passenger compartment temperature
- Control unit power supply
- Inserted gear
- system power supply
- Engine status
- gear box oil temperature
- transmission ratio
- gear box control error
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Direct transmission Converter lockup
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Torque limitation
- Kilometer reading
- Gearbox input speed
- Gearbox speed sensor (input)
- Solenoid valve 4/5
- Solenoid switch valve 5
- Transmission output speed
- Engine torque
- Ambient temperature
- Transformer bridging magnetic valve
- Transmission oil temperature sensor voltage
- Selector lever module
- Torque reduction on changing gear
- Transmission output torque
- Transmission oil temper. on starting
- Time within 100 - 110 °C
- Time within 110 - 120 °C
- Time within 120 - 130 °C
- Time within 130 - 140 °C
- Time within 140 - 150 °C
- Time > 150 °C
- Press. regul. sol. valve 1 set value
- Pressure regulator solenoid valve 1 actual value
- Pressure regulator solenoid valve 2 set value
- Pressure regulator solenoid valve 2 actual value
- Set value, solenoid valve, torque conv. lock-up
- Converter bridging solenoid valve actual pressure
- Geartronic
- Geartronic
- Geartronic -
- Winter mode
- Gear ratio actual value
- Gear ratio set value
- Start release by selector lever module
- **Actuators**
- Solenoid switch valve 1
- Solenoid switch valve 2
- Solenoid switch valve 3
- Solenoid switch valve 4
- Solenoid valve: direct gear direct gear
- modulating pressure: solenoid valve 1
- modulating pressure: solenoid valve 2
- Solenoid switch valve 5

- **Identification**
- **Clear errors**

2003/01
-
2006/07

B5254T2

2.5

210

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED

Central electronics
Front central electronics 9.12.2

- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper

- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay

Central electronics
Central electronics 1.0

- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump

					<ul style="list-style-type: none"> - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply

VOLVO				XC90 - XC90 V8 AWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal

			<ul style="list-style-type: none"> - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
		<p>Anti-block system ABS Teves Mk25 VER2</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Brake pedal position sensor - Voltage at CEM - Vehicle acceleration - Front left wheel, speed signal - Front right wheel, speed signal - Rear right wheel, speed signal - Rear left wheel, speed signal - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature • Actuators <ul style="list-style-type: none"> - Inlet valve: front right front right - Inlet valve: front left front left - Exhaust valve: front left front left - Exhaust valve: front right front right - Inlet valve: rear right - Inlet valve: rear left - Exhaust valve: rear right - Exhaust valve: rear left - Pump motor
			<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Adaptive parameters reset - Transm. oil change interval reset - Transmission position sensor calibration - Transmission adaptation • Special functions <ul style="list-style-type: none"> - Start gear indicator mode • Error memory • Current values <ul style="list-style-type: none"> - Accelerator pedal position - Coolant temperature

Gear box control
6-gears automatic transmission TF80SC

- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50

<p>2005/03 - 2010/12</p>	<p>B8444S</p>	<p>4.4</p>	<p>315</p>	<p>Central electronics Front central electronics 9.12.2</p>	<ul style="list-style-type: none"> - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay - Relay, daytime running lights - Front left door status - Front right door status - Rear left door status - Rear right door status - Hatchback status - Front left door locking - Front right door locking - Rear left door locking - Rear right door locking - Airbag triggering signal - Alarm LED - Xenon lamp status - Transponder ID received - Immobilizer relay status - Key number - Number of authorized keys - Ignition switch illuminated ring - Light sensor - Ignition key - Windscreen washing water level - Emergency lights switch - Front fog lights relay - Lights cleaning - Fog light switch - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor
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- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

• **Identification**

• **Clear errors**

• **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle

Central electronics
Central electronics 1.0

- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor
 - Ignition key
 - Windscreen washing water level

- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light

- Rear daylight running light

VOLVO				XC90 - XC90 3.2 AWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none">• Identification• Clear errors• Adjustments / settings<ul style="list-style-type: none">- Read configuration- Option display configuration- Service interval adaptation- Service interval display reset- Activate/deactivate belt warning- Parking brake warning tone• Error memory• Current values<ul style="list-style-type: none">- Failure lamp- Engine revolution- Warning lights- Kilometer reading- Fuel level in the tank- Rear fog light- Cooling agent temperature motor- Airbag signal lamp- Cruise control, control light- Oil pressure control lamp- Generator lamp- Brakes control light- ABS control light- Hi-beam lights, control light- Trailer turn sign. indicators, warning light- Fuel level warning lamp- Glow control light- Vehicle speed signal- TCS/ESP OFF warning light- Airbag warning light, status- Parking brake, control light• Actuators<ul style="list-style-type: none">- Warning lights- Failure lamp- Tank reserve lamp triggering- Gong- Preheat control light- Generator lamp- Hi-beam lights, control light- Rear fog lights control light- Trailer turn signal, control light- Airbag control light- All displays and control lights- ABS control light- Brakes control light- Parking brake, control light- ASR/ESP control light
					<ul style="list-style-type: none">• Identification• Clear errors• Functional tests<ul style="list-style-type: none">- ABS test• Error memory• Current values<ul style="list-style-type: none">- Vehicle driving speed- Battery voltage- stop lights switch- front left tire speed- front right tire speed- rear right tire speed

Anti-block system
ABS Teves Mk25 VER2

- rear left tire speed
- Brake pedal position sensor
- Voltage at CEM
- Vehicle acceleration
- Front left wheel, speed signal
- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

• **Actuators**

- Inlet valve: front right front right
- Inlet valve: front left front left
- Exhaust valve: front left front left
- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

Gear box control
6-gears automatic transmission TF80SC

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current

- Solenoid valve 2, actual current
- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay

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Central electronics
Front central electronics 9.12.2

- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right

- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)

Central electronics
Central electronics 1.0

- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code

				<ul style="list-style-type: none"> - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp

Instrument cluster
Instrument cluster 1.0

- Cruise control, control light
- Oil pressure control lamp
- Generator lamp
- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset

Gear box control
6-gears automatic transmission TF80SC

- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment

Central electronics
Front central electronics 9.12.2

- Rear wiper with reverse gear
- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor
 - Ignition key
 - Windscreen washing water level
 - Emergency lights switch
 - Front fog lights relay
 - Lights cleaning
 - Fog light switch

2010/08 -	B6324S5	3.2	243	<ul style="list-style-type: none"> - Indicator light, hazard warning lights system - Wiper - Front windscreen washer - Front windscreen wiper - Daytime driving light status - Fuel level left side - Fuel level right side - Status Generator - Ambient light sensor - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Relay terminal 15 - Windscreen wiper switch - Electronic control unit power supply - One-touch turn signal indication - Rear fog lights switch - Airbag system status - Hood monitoring - Passenger side belt warning - Headlight range control warning signal - Immobilizer: Start authorization - Rear wiper actuation by reverse gear - Battery temperature - Glove box light - Undervoltage shutoff threshold - Selector lever lock status - Dipped beam status - Transponder code - Transponder signal - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
<ul style="list-style-type: none"> • Identification 				

- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal

Central electronics
Central electronics 1.0

- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating

					<ul style="list-style-type: none"> - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply

VOLVO				XC90 - XC90 3.2 FWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light

		<ul style="list-style-type: none"> - Airbag control light - All displays and control lights - ABS control light - Brakes control light - Parking brake, control light - ASR/ESP control light
	<p>Anti-block system ESP Teves Mk25 E1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ESP test • Adjustments / settings <ul style="list-style-type: none"> - Brake pressure sensor zero pos. calibration - Lateral acceleration sensor zero position adjustment - Longitudinal acceleration sensor zero position adaptation - Adaptation, steering wheel angle sensor • Special functions <ul style="list-style-type: none"> - Bleed • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Battery voltage - Power supply - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - The ambient temperature - pressure sensor - Lateral acceleration sensor - Driving wheels angle - reflexive angle - Steering wheel angle offset - Longitudinal acceleration - Yaw rate sensor offset - Brake pressure sensor offset - Longitudinal acceleration sensor offset - Lateral acceleration sensor offset - Stored longitudinal acceleration sensor offset - Stored lateral acceleration sensor offset - Stored yaw rate sensor offset - Stored steering angle sensor offset - Stored brake pressure sensor offset - Brake booster vacuum chamber - Brake booster working chamber - LED STC/DSTC button - Front left brake disc temperature - Front right brake disc temperature - Rear left brake disc temperature - Rear right brake disc temperature
		<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - ABS test • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Battery voltage - stop lights switch - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed

Anti-block system
ABS Teves Mk25 VER2

- Brake pedal position sensor
- Voltage at CEM
- Vehicle acceleration
- Front left wheel, speed signal
- Front right wheel, speed signal
- Rear right wheel, speed signal
- Rear left wheel, speed signal
- Front left brake disc temperature
- Front right brake disc temperature
- Rear left brake disc temperature
- Rear right brake disc temperature

• **Actuators**

- Inlet valve: front right front right
- Inlet valve: front left front left
- Exhaust valve: front left front left
- Exhaust valve: front right front right
- Inlet valve: rear right
- Inlet valve: rear left
- Exhaust valve: rear right
- Exhaust valve: rear left
- Pump motor

Gear box control
6-gears automatic transmission TF80SC

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Adaptive parameters reset
- Transm. oil change interval reset
- Transmission position sensor calibration
- Transmission adaptation

• **Special functions**

- Start gear indicator mode

• **Error memory**

• **Current values**

- Accelerator pedal position
- Coolant temperature
- Transmission control, torque reduction
- kick-down switch
- Power supply
- Engine revolution
- Passenger compartment temperature
- The ambient temperature
- gear box oil temperature
- transmission ratio
- battery voltage, terminal 30
- Solenoid valve: direct gear direct gear
- Start permission
- Brake pedal switch
- Distance
- Gear lever position
- Needed gear
- Gearbox input speed
- MIL-Status
- Engine actual moment
- Transmission output speed
- Gear box transmission identification
- Driving speed sensor signal
- Gearshift solenoid 1
- Gearshift solenoid 2
- Transmission selector lever position P
- Gear position in manual program
- Fault message
- Solenoid valve 4 actuation current
- Solenoid valve 5 actuation current
- Torque converter lock-up clutch solenoid valve
- Geartronic
- Geartronic -
- Solenoid valve 1, actual current
- Solenoid valve 2, actual current

- Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay

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Central electronics
Front central electronics 9.12.2

- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump

- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication

Central electronics
Central electronics 1.0

- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal

				<ul style="list-style-type: none"> - Wiper relay 2 - Rear window washer relay - Infotainment relay - Continued operation of headlights - Relay 4 terminal 15 • Actuators <ul style="list-style-type: none"> - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp

Instrument cluster
Instrument cluster 1.0

- Brakes control light
- ABS control light
- Hi-beam lights, control light
- Trailer turn sign. indicators, warning light
- Fuel level warning lamp
- Glow control light
- Vehicle speed signal
- TCS/ESP OFF warning light
- Airbag warning light, status
- Parking brake, control light
- **Actuators**
 - Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
 - ABS test
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rare right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
 - Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Adaptive parameters reset
 - Transm. oil change interval reset

Gear box control
6-gears automatic transmission TF80SC

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Transmission control, torque reduction
 - kick-down switch
 - Power supply
 - Engine revolution
 - Passenger compartment temperature
 - The ambient temperature
 - gear box oil temperature
 - transmission ratio
 - battery voltage, terminal 30
 - Solenoid valve: direct gear direct gear
 - Start permission
 - Brake pedal switch
 - Distance
 - Gear lever position
 - Needed gear
 - Gearbox input speed
 - MIL-Status
 - Engine actual moment
 - Transmission output speed
 - Gear box transmission identification
 - Driving speed sensor signal
 - Gearshift solenoid 1
 - Gearshift solenoid 2
 - Transmission selector lever position P
 - Gear position in manual program
 - Fault message
 - Solenoid valve 4 actuation current
 - Solenoid valve 5 actuation current
 - Torque converter lock-up clutch solenoid valve
 - Geartronic
 - Geartronic -
 - Solenoid valve 1, actual current
 - Solenoid valve 2, actual current
 - Solenoid valve 3, actual current
- **Actuators**
 - Gear shift solenoid valve 1
 - Gear shift solenoid valve 2
 - Torque converter lock-up clutch solenoid valve
 - Pressure-regulation magnetic valve 1
 - Pressure-regulation magnetic valve 2
 - Pressure-regulation magnetic valve 3
 - Pressure control solenoid valve 4
 - Pressure control magnetic valve 5

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear

Central electronics
Front central electronics 9.12.2

- Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status
 - Rear right door status
 - Hatchback status
 - Front left door locking
 - Front right door locking
 - Rear left door locking
 - Rear right door locking
 - Airbag triggering signal
 - Alarm LED
 - Xenon lamp status
 - Transponder ID received
 - Immobilizer relay status
 - Key number
 - Number of authorized keys
 - Ignition switch illuminated ring
 - Light sensor
 - Ignition key
 - Windscreen washing water level
 - Emergency lights switch
 - Front fog lights relay
 - Lights cleaning
 - Fog light switch
 - Indicator light, hazard warning lights system

- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

• **Actuators**

- electric fuel pump relay
- Parking lights, front left
- Parking lights, front right
- Short lights, left
- Short lights, right
- windscreen washing pump
- Rear window washer pump
- Rear window washing pump
- Brake lights
- Daytime driving light relay
- Relay for additional lamps
- Hazard warning lights
- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**

- Alternator voltage functional test

• **Adjustments / settings**

- Start mode
- Seat heating adjustment
- Blower motor, run-on
- Reset undervoltage counter
- Reset crash detection signal
- Adjustment: Lighting on leaving vehicle
- Adjustment: One-touch turn signal indication
- Fuel tank cap locking
- Illumination system
- Daytime driving light adjustment
- Rear wiper with reverse gear
- Dipped beam warning

• **Error memory**

• **Current values**

- Vehicle driving speed
- Total run
- Contact switch
- Fuel pump relay
- start signal, terminal 50
- Cruise control
- Terminal 30
- Immobilizer
- engine control unit ignition blocking
- Terminal 15
- Start permission
- Output stage group A
- Output stage group B
- Function windscreen washing
- Function washing rear window washing
- End position windshield wiper
- Tank filling door
- Stationary heater/ventilation activation
- Supply voltage term.30
- Switch identification
- Vehicle model
- Transponder
- Signal horn
- Vehicle information (VIN)
- Transponder communication
- Generator, L-Signal
- Headlight level control signal
- Left xenon lamp signal
- Right xenon lamp signal
- Power supply relay
- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status

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- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights
 - Wiper speed 1 relay
 - Wiper speed 2 relay
 - Windshield washer system relay
 - Relay for horn
 - Ignition switch illuminated ring
 - Selector lever lock
 - Leakage diagnosis pump heating
 - Windshield wiper
 - Fog light

					<ul style="list-style-type: none"> - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply

VOLVO				XC90 - XC90 D3 FWD	
Year	Engine	Liters	HP	System	Functions
				Instrument cluster Instrument cluster 1.0	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values <ul style="list-style-type: none"> - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp - Generator lamp - Brakes control light - ABS control light - Hi-beam lights, control light - Trailer turn sign. indicators, warning light - Fuel level warning lamp - Glow control light - Vehicle speed signal - TCS/ESP OFF warning light - Airbag warning light, status - Parking brake, control light • Actuators <ul style="list-style-type: none"> - Warning lights - Failure lamp - Tank reserve lamp triggering - Gong - Preheat control light - Generator lamp - Hi-beam lights, control light - Rear fog lights control light - Trailer turn signal, control light - Airbag control light

- All displays and control lights
- ABS control light
- Brakes control light
- Parking brake, control light
- ASR/ESP control light

- **Identification**
- **Clear errors**
- **Functional tests**
 - Alternator voltage functional test
- **Adjustments / settings**
 - Start mode
 - Seat heating adjustment
 - Blower motor, run-on
 - Reset undervoltage counter
 - Reset crash detection signal
 - Adjustment: Lighting on leaving vehicle
 - Adjustment: One-touch turn signal indication
 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Total run
 - Contact switch
 - Fuel pump relay
 - start signal, terminal 50
 - Cruise control
 - Terminal 30
 - Immobilizer
 - engine control unit ignition blocking
 - Terminal 15
 - Start permission
 - Output stage group A
 - Output stage group B
 - Function windscreen washing
 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
 - Transponder communication
 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay
 - Automatic transmission power supply
 - Selector lever lock relay
 - Relay starter
 - Rear left window
 - Rear right window
 - Childproof lock relay
 - Main beam relay
 - Low-beam relay
 - Stand light relay
 - Relay, daytime running lights
 - Front left door status
 - Front right door status
 - Rear left door status

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- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump
 - Brake lights
 - Daytime driving light relay
 - Relay for additional lamps
 - Hazard warning lights

- Wiper speed 1 relay
- Wiper speed 2 relay
- Windshield washer system relay
- Relay for horn
- Ignition switch illuminated ring
- Selector lever lock
- Leakage diagnosis pump heating
- Windshield wiper
- Fog light
- rear left el. window lifter open
- rear left el. window lifter closed
- rear right el. window lifter open
- rear right el. window lifter closed
- Relay for parking lights
- Relay for low-beam headlights
- Relay for high-beam headlights
- Left daylight running light
- Rear daylight running light

- **Identification**
- **Clear errors**
- **Functional tests**
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- **Adjustments / settings**
 - Start mode
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 - Blower motor, run-on
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 - Fuel tank cap locking
 - Illumination system
 - Daytime driving light adjustment
 - Rear wiper with reverse gear
 - Dipped beam warning
- **Error memory**
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 - Terminal 30
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 - Function washing rear window washing
 - End position windshield wiper
 - Tank filling door
 - Stationary heater/ventilation activation
 - Supply voltage term.30
 - Switch identification
 - Vehicle model
 - Transponder
 - Signal horn
 - Vehicle information (VIN)
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 - Generator, L-Signal
 - Headlight level control signal
 - Left xenon lamp signal
 - Right xenon lamp signal
 - Power supply relay

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- Automatic transmission power supply
- Selector lever lock relay
- Relay starter
- Rear left window
- Rear right window
- Childproof lock relay
- Main beam relay
- Low-beam relay
- Stand light relay
- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
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- Front windscreen wiper
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- Fuel level left side
- Fuel level right side
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- Seat belt lock switch front passenger seat
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- Selector lever lock status
- Dipped beam status
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- Transponder signal
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- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15

					<ul style="list-style-type: none"> • Actuators - electric fuel pump relay - Parking lights, front left - Parking lights, front right - Short lights, left - Short lights, right - windscreen washing pump - Rear window washer pump - Rear window washing pump - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
				Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply

VOLVO					XC90 - XC90 T5 AWD	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Read configuration - Option display configuration - Service interval adaptation - Service interval display reset - Activate/deactivate belt warning - Parking brake warning tone • Error memory • Current values - Failure lamp - Engine revolution - Warning lights - Kilometer reading - Fuel level in the tank - Rear fog light - Cooling agent temperature motor - Airbag signal lamp - Cruise control, control light - Oil pressure control lamp 	

Instrument cluster
Instrument cluster 1.0

- Generator lamp
 - Brakes control light
 - ABS control light
 - Hi-beam lights, control light
 - Trailer turn sign. indicators, warning light
 - Fuel level warning lamp
 - Glow control light
 - Vehicle speed signal
 - TCS/ESP OFF warning light
 - Airbag warning light, status
 - Parking brake, control light
- **Actuators**
- Warning lights
 - Failure lamp
 - Tank reserve lamp triggering
 - Gong
 - Preheat control light
 - Generator lamp
 - Hi-beam lights, control light
 - Rear fog lights control light
 - Trailer turn signal, control light
 - Airbag control light
 - All displays and control lights
 - ABS control light
 - Brakes control light
 - Parking brake, control light
 - ASR/ESP control light

Anti-block system
ABS Teves Mk25 VER2

- **Identification**
- **Clear errors**
- **Functional tests**
- ABS test
- **Error memory**
- **Current values**
- Vehicle driving speed
 - Battery voltage
 - stop lights switch
 - front left tire speed
 - front right tire speed
 - rear right tire speed
 - rear left tire speed
 - Brake pedal position sensor
 - Voltage at CEM
 - Vehicle acceleration
 - Front left wheel, speed signal
 - Front right wheel, speed signal
 - Rear right wheel, speed signal
 - Rear left wheel, speed signal
 - Front left brake disc temperature
 - Front right brake disc temperature
 - Rear left brake disc temperature
 - Rear right brake disc temperature
- **Actuators**
- Inlet valve: front right front right
 - Inlet valve: front left front left
 - Exhaust valve: front left front left
 - Exhaust valve: front right front right
 - Inlet valve: rear right
 - Inlet valve: rear left
 - Exhaust valve: rear right
 - Exhaust valve: rear left
 - Pump motor

- **Identification**
- **Clear errors**
- **Adjustments / settings**
- Adaptive parameters reset
 - Transm. oil change interval reset

Gear box control
5-gears automatic transmission 55-
50/51SN2.0

- Transmission position sensor calibration
- Transmission adaptation
- **Special functions**
 - Start gear indicator mode
 - Start test mode
- **Error memory**
- **Current values**
 - Accelerator pedal position
 - Coolant temperature
 - Battery voltage
 - Driving speed
 - Gear lever AT position
 - kick-down switch
 - Solenoid valve 1/2
 - Engine revolution
 - Solenoid valve 3
 - stop lights switch
 - Winter switch
 - Passenger compartment temperature
 - Control unit power supply
 - Inserted gear
 - system power supply
 - Engine status
 - gear box oil temperature
 - transmission ratio
 - gear box control error
 - Solenoid switch valve 1
 - Solenoid switch valve 2
 - Solenoid switch valve 3
 - Solenoid switch valve 4
 - Direct transmission Converter lockup
 - modulating pressure: solenoid valve 1
 - modulating pressure: solenoid valve 2
 - Torque limitation
 - Kilometer reading
 - Gearbox input speed
 - Gearbox speed sensor (input)
 - Solenoid valve 4/5
 - Solenoid switch valve 5
 - Transmission output speed
 - Engine torque
 - Ambient temperature
 - Transformer bridging magnetic valve
 - Transmission oil temperature sensor voltage
 - Selector lever module
 - Torque reduction on changing gear
 - Transmission output torque
 - Transmission oil temper. on starting
 - Time within 100 - 110 °C
 - Time within 110 - 120 °C
 - Time within 120 - 130 °C
 - Time within 130 - 140 °C
 - Time within 140 - 150 °C
 - Time > 150 °C
 - Press. regul. sol. valve 1 set value
 - Pressure regulator solenoid valve 1 actual value
 - Pressure regulator solenoid valve 2 set value
 - Pressure regulator solenoid valve 2 actual value
 - Set value, solenoid valve, torque conv. lock-up
 - Converter bridging solenoid valve actual pressure
 - Geartronic
 - Geartronic
 - Geartronic -
 - Winter mode
 - Gear ratio actual value
 - Gear ratio set value
 - Start release by selector lever module

2012/08 -	B5254T9	2.5	209	<ul style="list-style-type: none"> • Actuators <ul style="list-style-type: none"> - Solenoid switch valve 1 - Solenoid switch valve 2 - Solenoid switch valve 3 - Solenoid switch valve 4 - Solenoid valve: direct gear direct gear - modulating pressure: solenoid valve 1 - modulating pressure: solenoid valve 2 - Solenoid switch valve 5
				<ul style="list-style-type: none"> • Identification • Clear errors • Functional tests <ul style="list-style-type: none"> - Alternator voltage functional test • Adjustments / settings <ul style="list-style-type: none"> - Start mode - Seat heating adjustment - Blower motor, run-on - Reset undervoltage counter - Reset crash detection signal - Adjustment: Lighting on leaving vehicle - Adjustment: One-touch turn signal indication - Fuel tank cap locking - Illumination system - Daytime driving light adjustment - Rear wiper with reverse gear - Dipped beam warning • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Total run - Contact switch - Fuel pump relay - start signal, terminal 50 - Cruise control - Terminal 30 - Immobilizer - engine control unit ignition blocking - Terminal 15 - Start permission - Output stage group A - Output stage group B - Function windscreen washing - Function washing rear window washing - End position windshield wiper - Tank filling door - Stationary heater/ventilation activation - Supply voltage term.30 - Switch identification - Vehicle model - Transponder - Signal horn - Vehicle information (VIN) - Transponder communication - Generator, L-Signal - Headlight level control signal - Left xenon lamp signal - Right xenon lamp signal - Power supply relay - Automatic transmission power supply - Selector lever lock relay - Relay starter - Rear left window - Rear right window - Childproof lock relay - Main beam relay - Low-beam relay - Stand light relay

Central electronics
Central electronics 1.0

- Relay, daytime running lights
- Front left door status
- Front right door status
- Rear left door status
- Rear right door status
- Hatchback status
- Front left door locking
- Front right door locking
- Rear left door locking
- Rear right door locking
- Airbag triggering signal
- Alarm LED
- Xenon lamp status
- Transponder ID received
- Immobilizer relay status
- Key number
- Number of authorized keys
- Ignition switch illuminated ring
- Light sensor
- Ignition key
- Windscreen washing water level
- Emergency lights switch
- Front fog lights relay
- Lights cleaning
- Fog light switch
- Indicator light, hazard warning lights system
- Wiper
- Front windscreen washer
- Front windscreen wiper
- Daytime driving light status
- Fuel level left side
- Fuel level right side
- Status Generator
- Ambient light sensor
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Relay terminal 15
- Windscreen wiper switch
- Electronic control unit power supply
- One-touch turn signal indication
- Rear fog lights switch
- Airbag system status
- Hood monitoring
- Passenger side belt warning
- Headlight range control warning signal
- Immobilizer: Start authorization
- Rear wiper actuation by reverse gear
- Battery temperature
- Glove box light
- Undervoltage shutoff threshold
- Selector lever lock status
- Dipped beam status
- Transponder code
- Transponder signal
- Wiper relay 2
- Rear window washer relay
- Infotainment relay
- Continued operation of headlights
- Relay 4 terminal 15
- **Actuators**
 - electric fuel pump relay
 - Parking lights, front left
 - Parking lights, front right
 - Short lights, left
 - Short lights, right
 - windscreen washing pump
 - Rear window washer pump
 - Rear window washing pump

				<ul style="list-style-type: none"> - Brake lights - Daytime driving light relay - Relay for additional lamps - Hazard warning lights - Wiper speed 1 relay - Wiper speed 2 relay - Windshield washer system relay - Relay for horn - Ignition switch illuminated ring - Selector lever lock - Leakage diagnosis pump heating - Windshield wiper - Fog light - rear left el. window lifter open - rear left el. window lifter closed - rear right el. window lifter open - rear right el. window lifter closed - Relay for parking lights - Relay for low-beam headlights - Relay for high-beam headlights - Left daylight running light - Rear daylight running light
			Steering wheel rotation angle sensor Steering angle sensor 2.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Control unit, power supply - Driving wheels angle - Steering wheel rotational speed - Steering angle - Central electronics power supply

[Beetle \[5C1\] - Beetle 1.2 TSI](#)
[Beetle \[5C1\] - Beetle 1.4 TSI](#)
[Beetle \[5C1\] - Beetle 1.6 TDI](#)
[Beetle \[5C1\] - Beetle 2.0 TSI](#)
[Beetle \[5C1\] - Beetle 2.0 TDI](#)
[Beetle \[5C7\] Cabriolet - Beetle 1.2 TSI Cabriolet](#)
[Beetle \[5C7\] Cabriolet - Beetle 1.4 TSI Cabriolet](#)
[Beetle \[5C7\] Cabriolet - Beetle 1.6 TDI Cabriolet](#)
[Beetle \[5C7\] Cabriolet - Beetle 2.0 TDI Cabriolet](#)
[Beetle \[5C7\] Cabriolet - Beetle 2.0 TSI Cabriolet](#)
[Beetle \[5C7\] Cabriolet - Beetle 2.5 Cabriolet](#)
[Beetle \[5C7\] Cabriolet - Beetle 2.5 TFSI Cabriolet](#)
[CC \[358\] - CC 1.4 TSI](#)
[CC \[358\] - CC 1.8 TSI](#)
[CC \[358\] - CC 2.0 TSI](#)
[CC \[358\] - CC 3.6 FSI 4Motion](#)
[CC \[358\] - CC 2.0 TDI](#)
[CC \[358\] - CC 2.0 TDI 4Motion](#)
[CC \[358\] - CC 2.0 TFSI](#)
[Dasher \[32\] - Dasher 1.6 Diesel](#)
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[Golf Plus \[521\] - Golf Plus 1.6](#)
[Golf Plus \[521\] - Golf Plus 1.4 TSI](#)
[Golf Plus \[521\] - Golf Plus 1.2 TSI](#)
[Golf Plus \[521\] - Golf Plus 1.6 BiFuel](#)
[Golf Plus \[521\] - Golf Plus 1.6 TDI](#)
[Golf Plus \[521\] - Golf Plus 2.0 TDI](#)
[Golf Plus \[521\] - Golf Plus 1.4 FSI](#)
[Golf VI - Golf VI 1.4 TSI](#)
[Golf VI - Golf VI 2.0 GTI](#)
[Golf VI \[517\] Cabrio - Golf VI 1.2 TSI Cabrio](#)
[Golf VI \[517\] Cabrio - Golf VI 1.4 TSI Cabrio](#)
[Golf VI \[517\] Cabrio - Golf VI 1.6 TDI Cabrio](#)
[Golf VI \[517\] Cabrio - Golf VI 2.0 TDI Cabrio](#)
[Golf VI \[517\] Cabrio - Golf VI 2.0 TSI Cabrio](#)
[Golf VI \[5K1\] - Golf VI 1.4](#)
[Golf VI \[5K1\] - Golf VI 1.6](#)
[Golf VI \[5K1\] - Golf VI 1.4 TSI](#)
[Golf VI \[5K1\] - Golf VI 1.6 BiFuel](#)
[Golf VI \[5K1\] - Golf VI 1.6 TDI](#)
[Golf VI \[5K1\] - Golf VI 2.0 TDI](#)
[Golf VI \[5K1\] - Golf VI 2.0 GTI](#)
[Golf VI \[5K1\] - Golf VI 2.0 TDI 4Motion](#)
[Golf VI \[5K1\] - Golf VI 1.2 TSI](#)
[Golf VI \[5K1\] - Golf VI 2.0 TSI 4Motion](#)
[Golf VI \[5K1\] - Golf VI 2.5](#)

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[Golf VI \[5K1\] - Golf VI 1.8 TSI](#)
[Golf VI \[5K1\] - Golf VI 2.0 4Motion](#)
[Golf VI \[AJ5\] Variant - Golf VI 1.2 TSI Variant](#)
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[Golf VII \[5G1\] - Golf VII 1.2 TSI](#)
[Golf VII \[5G1\] - Golf VII 1.4 TSI](#)
[Golf VII \[5G1\] - Golf VII 1.4 TSI ACT](#)
[Golf VII \[5G1\] - Golf VII 1.6 TDI](#)
[Golf VII \[5G1\] - Golf VII 1.6 TDI 4Motion](#)
[Golf VII \[5G1\] - Golf VII 2.0 TDI](#)
[Golf VII \[5G1\] - Golf VII 1.4 TSI MultiFuel](#)
[Golf VII \[5G1\] - Golf VII 2.0 TDI 4Motion](#)
[Passat \[357\] CC - Passat 3.6 FSI CC 4Motion](#)
[Passat \[357\] CC - Passat 1.8 TSI CC](#)
[Passat \[357\] CC - Passat 2.0 TDI CC](#)
[Passat \[357\] CC - Passat 2.0 TSI CC](#)
[Passat \[357\] CC - Passat 3.6 FSI CC](#)
[Passat \[357\] CC - Passat 2.0 TDI CC 4Motion](#)
[Passat \[357\] CC - Passat 1.4 TSI CC](#)
[Passat \[362\] - Passat 1.4 TSI](#)
[Passat \[362\] - Passat 1.4 TSI EcoFuel](#)
[Passat \[362\] - Passat 1.8 FSI](#)
[Passat \[362\] - Passat 2.0 TSI](#)
[Passat \[362\] - Passat 1.6 TDI](#)
[Passat \[362\] - Passat 2.0 TDI](#)
[Passat \[362\] - Passat 2.0 TDI 4Motion](#)
[Passat \[362\] - Passat 3.6 V6 4Motion](#)
[Passat \[362\] - Passat 1.8 TSI](#)
[Passat \[365\] Alltrack - Passat 1.8 TSI Alltrack](#)
[Passat \[365\] Alltrack - Passat 2.0 TDI Alltrack](#)
[Passat \[365\] Alltrack - Passat 2.0 TDI Alltrack 4Motion](#)
[Passat \[365\] Alltrack - Passat 2.0 TSI Alltrack 4Motion](#)
[Passat \[365\] Variant - Passat 1.4 TSI Variant](#)
[Passat \[365\] Variant - Passat 1.4 TSI EcoFuel Variant](#)
[Passat \[365\] Variant - Passat 1.6 TDI Variant](#)
[Passat \[365\] Variant - Passat 1.8 FSI Variant](#)
[Passat \[365\] Variant - Passat 2.0 TDI Variant](#)
[Passat \[365\] Variant - Passat 2.0 TDI Variant 4Motion](#)
[Passat \[365\] Variant - Passat 2.0 TSI Variant](#)
[Passat \[365\] Variant - Passat 3.6 V6 Variant 4Motion](#)
[Passat \[365\] Variant - Passat 1.8 TSI Variant](#)

[Passat \[3C2\] - Passat 2.0 TSI](#)
[Passat \[3C2\] - Passat 3.2 FSI 4Motion](#)
[Passat \[3C2\] - Passat 1.9 TDI](#)
[Passat \[3C2\] - Passat 2.0 TDI](#)
[Passat \[3C2\] - Passat 1.6 FSI](#)
[Passat \[3C2\] - Passat 2.0 FSI](#)
[Passat \[3C2\] - Passat 2.0 FSI 4Motion](#)
[Passat \[3C2\] - Passat 1.6](#)
[Passat \[3C2\] - Passat 2.0 TDI 4Motion](#)
[Passat \[3C2\] - Passat 3.6 FSI 4Motion](#)
[Passat \[3C2\] - Passat 3.6 FSI](#)
[Passat \[3C2\] - Passat 3.6 FSI R36 4Motion](#)
[Passat \[3C2\] - Passat 1.4 TSI](#)
[Passat \[3C2\] - Passat 1.4 TSI EcoFuel](#)
[Passat \[3C2\] - Passat 1.8 TSI](#)
[Passat \[3C2\] - Passat 1.6 TDI](#)
[Passat \[3C2\] - Passat 1.8 FSI](#)
[Passat \[3C5\] Variant - Passat 2.0 TSI Variant](#)
[Passat \[3C5\] Variant - Passat 3.2 FSI Variant 4Motion](#)
[Passat \[3C5\] Variant - Passat 1.9 TDI Variant](#)
[Passat \[3C5\] Variant - Passat 2.0 TDI Variant](#)
[Passat \[3C5\] Variant - Passat 2.0 TDI Variant 4Motion](#)
[Passat \[3C5\] Variant - Passat 1.6 FSI Variant](#)
[Passat \[3C5\] Variant - Passat 2.0 FSI Variant](#)
[Passat \[3C5\] Variant - Passat 1.6 Variant](#)
[Passat \[3C5\] Variant - Passat 2.0 FSI Variant 4Motion](#)
[Passat \[3C5\] Variant - Passat 3.6 FSI Variant](#)
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[Passat \[3C5\] Variant - Passat 1.8 TSI Variant](#)
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[Sharan \[7N1\] - Sharan 2.0 TDI](#)
[Sharan \[7N1\] - Sharan 2.0 TDI 4Motion](#)
[Sharan \[7N1\] - Sharan 2.0 TSI](#)
[Touareg \[7P5\] - Touareg 3.0 FSI Hybrid](#)
[Touareg \[7P5\] - Touareg 3.0 TDI](#)
[Touareg \[7P5\] - Touareg 4.2 TDI](#)
[Touareg \[7P5\] - Touareg 4.2 FSI](#)
[Touareg \[7P5\] - Touareg 3.6 FSI](#)

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure

2011/07 -	CBZB	1.2	105	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded
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					<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW Beetle [5C1] - Beetle 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed

- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded

2011/10
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CAVD

1.4

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Tire control system
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded

				<ul style="list-style-type: none"> - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure

- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded

- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set

					<ul style="list-style-type: none"> - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW Beetle [5C1] - Beetle 1.6 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4

2011/10
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CAYC

1.6

105

Tire control system
Tire pressure monitor 4.0

- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded

- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure

					<ul style="list-style-type: none"> - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW Beetle [5C1] - Beetle 2.0 TSI

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11

2011/07
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CCZA

2.0

200

Tire control system
Tire pressure monitor 4.0

- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded

loaded

- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

• **Identification**

- **Clear errors**
- **Adjustments / settings**
 - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - CAN communication
 - Supply voltage term.30
 - Tire pressure monitoring status
 - Transportation mode
 - System status
 - Inflation pressure sensor 1 Temperature
 - Inflation pressure sensor 2 Temperature
 - Inflation pressure sensor 3 Temperature
 - Inflation pressure sensor 4 Temperature
 - Inflation pressure sensor 1 Sensor code
 - Inflation pressure sensor 2 Sensor code
 - Inflation pressure sensor 3 Sensor code
 - Inflation pressure sensor 4 Sensor code
 - Radio interference
 - Load status selected
 - Warning: Check front left tire pressure
 - Warning: Check front right tire pressure
 - Tire pressure sensor 1: Actual pressure
 - Tire pressure sensor 1: Specified pressure
 - Tire pressure sensor 1: Wheel position
 - Tire pressure sensor 2: Actual pressure
 - Tire pressure sensor 2: Specified pressure
 - Tire pressure sensor 2: Wheel position
 - Tire pressure sensor 3: Actual pressure
 - Tire pressure sensor 3: Specified pressure
 - Tire pressure sensor 3: Wheel position
 - Designation wheel set 1
 - Designation wheel set 2
 - Designation wheel set 3
 - Designation wheel set 4
 - Designation wheel set 5
 - Designation wheel set 6
 - Designation wheel set 7
 - Designation wheel set 8
 - Designation wheel set 9
 - Designation wheel set 10
 - Currently monitored wheel set
 - Designation of currently monitored wheel set
 - Warning: Front left tire flat
 - Warning: Front right tire flat
 - Warning: Rear left tire flat
 - Warning: Rear right tire flat
 - Designation wheel set 11
 - Vehicle speed CAN message
 - CAN message voltage terminal 30
 - Tire pressure sensor: Last actual temperature received
 - Tire pressure sensor: Last actual pressure received
 - Tire pressure monitor sensor: Last wheel position received
 - Tire pressure monitor sensor: Last sensor code received
 - Tire pressure sensor 4: Actual pressure
 - Tire pressure sensor 4: Specified pressure
 - Tire pressure sensor 4: Wheel position
 - Wheel set 1 specified pressure, front axle, partially loaded
 - Wheel set 1 specified pressure, front axle, fully loaded
 - Wheel set 1 specified pressure, rear axle,

2011/04 -	CBFA	2.0	200	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle,
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					<ul style="list-style-type: none"> partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW					Beetle [5C1] - Beetle 2.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status 	

- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle,

2012/04 - 2012/07	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle,
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					partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW Beetle [5C7] Cabriolet - Beetle 1.2 TSI Cabriolet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure

2013/01

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CBZB

1.2

105

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded

- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set

					<ul style="list-style-type: none"> - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW					Beetle [5C7] Cabriolet - Beetle 1.4 TSI Cabriolet	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 	

					<ul style="list-style-type: none"> - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully
2013/01 -	CTHD	1.4	160	Tire control system Tire pressure monitor 4.0	

loaded

- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified

					pressure - Rear left tire pressure sensor specified pressure pressure - Rear right tire pressure sensor specified pressure pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW Beetle [5C7] Cabriolet - Beetle 1.6 TDI Cabriolet

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message

2013/01
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CAYC

1.6

105

Tire control system
Tire pressure monitor 4.0

- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded

				<ul style="list-style-type: none"> - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position

2013/01 -	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded
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					<ul style="list-style-type: none"> - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW Beetle [5C7] Cabriolet - Beetle 2.0 TSI Cabriolet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication

- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle,

2013/01
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CCZA

2.0

200

Tire control system
Tire pressure monitor 4.0

- partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle,

					<ul style="list-style-type: none"> partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW Beetle [5C7] Cabriolet - Beetle 2.5 Cabriolet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference

- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded

2012/09 -	CBUA	2.5	152	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low
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					<ul style="list-style-type: none"> - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW Beetle [5C7] Cabriolet - Beetle 2.5 TFSI Cabriolet					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1

2012/09 -	CCTA	2.0	0	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded
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loaded

- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure

					<ul style="list-style-type: none"> - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW	CC [358] - CC 1.4 TSI
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Year	Engine	Liters	HP	System	Functions
2011/11 -	CKMA	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

2012/11 -	CTHD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW CC [358] - CC 1.8 TSI					
Year	Engine	Liters	HP	System	Functions
2011/11				Cruise control	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end

-	CDA	1.8	160	ACC 3.1	<ul style="list-style-type: none"> - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					CC [358] - CC 2.0 TSI	
Year	Engine	Liters	HP	System	Functions	
2011/11 -	CCZB	2.0	211	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel 	

					<ul style="list-style-type: none"> - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW CC [358] - CC 3.6 FSI 4Motion

Year	Engine	Liters	HP	System	Functions
2011/11 -	BWS	3.6	299	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW CC [358] - CC 2.0 TDI

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed

2011/11 -	CFFA	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2011/11 - 2013/01	CFGB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC

					<ul style="list-style-type: none"> - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <ul style="list-style-type: none"> • Actuators
2012/01 -	CLLA	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <ul style="list-style-type: none"> • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed

2012/12 -	CFGC	2.0	177	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW						CC [358] - CC 2.0 TDI 4Motion					
Year	Engine	Liters	HP	System	Functions						
2011/11 -	CFFB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed 						

					<ul style="list-style-type: none"> - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2011/11 - 2013/01	CFGB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply

2012/12 -	CFGC	2.0	177	Cruise control ACC 3.1	<ul style="list-style-type: none"> - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW CC [358] - CC 2.0 TFSI					
Year	Engine	Liters	HP	System	Functions
2011/11 -	CCTA	2.0	203	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end

				<ul style="list-style-type: none"> - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					Dasher [32] - Dasher 1.6 Diesel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front <ul style="list-style-type: none"> - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side side <ul style="list-style-type: none"> - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front <ul style="list-style-type: none"> - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side side <ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: 	

1980/09
-
1981/08

CR

1.6

54

Airbag
Airbag AB 20 UDS

Ohm value

- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle

					<p>characteristic 3</p> <ul style="list-style-type: none"> - Left belt tensioner: tensioning cycle <p>characteristic 4</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 1</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 2</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 3</p> <ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle <p>characteristic 4</p> <ul style="list-style-type: none"> - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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VW Golf Plus [521] - Golf Plus 1.4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed

2009/01 -	CGGA	1.4	80	Cruise control ACC 3.1	<ul style="list-style-type: none"> - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2009/05 - 2011/06	BUD	1.4	80	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET

					<ul style="list-style-type: none"> - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf Plus [521] - Golf Plus 1.6

Year	Engine	Liters	HP	System	Functions
2009/05 -	BSE	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

2009/01 -	BSF	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
2010/05 -	CMXA	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance

					<ul style="list-style-type: none"> - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf Plus [521] - Golf Plus 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
2009/01 -	CAXA	1.4	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration

2009/01 - 2012/09	CAVD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Actuators • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance

2012/05 -	CTHD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf Plus [521] - Golf Plus 1.2 TSI					
Year	Engine	Liters	HP	System	Functions
2009/08 -	CBZB	1.2	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit

					<ul style="list-style-type: none"> - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2010/05 -	CBZA	1.2	86	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>

VW Golf Plus [521] - Golf Plus 1.6 BiFuel					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor

2009/05 -	CHGA	1.6	98 - 102	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <ul style="list-style-type: none"> • Actuators
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VW Golf Plus [521] - Golf Plus 1.6 TDI					
Year	Engine	Liters	HP	System	Functions
2009/05 -	CAYB	1.6	90	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET

					<ul style="list-style-type: none"> - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf Plus [521] - Golf Plus 2.0 TDI

Year	Engine	Liters	HP	System	Functions
2009/01 - 2010/05	CBDC	2.0	110	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

2009/01 - 2009/11	CBDB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
2009/11 -	CFHC	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance

					<ul style="list-style-type: none"> - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2010/05 -	CLCA	2.0	110	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>

Year	Engine	Liters	HP	System	Functions
2009/05 - 2010/12	BLN	1.4	90	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Golf VI - Golf VI 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed -

2009/10 -	CFB	1.4	131	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Golf VI - Golf VI 2.0 GTI					
Year	Engine	Liters	HP	System	Functions
2010/02 -	CGM	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch.

					module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Golf VI [517] Cabrio - Golf VI 1.2 TSI Cabrio					
Year	Engine	Liters	HP	System	Functions
2011/03 -	CBZB	1.2	105	Cruise control ACC 3.1	• Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Golf VI [517] Cabrio - Golf VI 1.4 TSI Cabrio					
Year	Engine	Liters	HP	System	Functions
					• Identification • Clear errors

2011/03 - 2012/09	CAVD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration
2011/11 -	CAXA	1.4	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end

					<ul style="list-style-type: none"> - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2012/09 -	CTHD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>

Year	Engine	Liters	HP	System	Functions
2011/03 -	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Golf VI [517] Cabrio - Golf VI 2.0 TDI Cabrio					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed -

2011/11 -	CFHC	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <ul style="list-style-type: none"> • Actuators
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VW					
Golf VI [517] Cabrio - Golf VI 2.0 TSI Cabrio					
Year	Engine	Liters	HP	System	Functions
2012/05 -	CCZB	2.0	211	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch.

					<ul style="list-style-type: none"> module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2013/01 -	CDLA	2.0	265	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>

VW Golf VI [5K1] - Golf VI 1.4					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed

2008/10 - 2012/11	CGGA	1.4	80	Cruise control ACC 3.1	<ul style="list-style-type: none"> - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf VI [5K1] - Golf VI 1.6					
Year	Engine	Liters	HP	System	Functions
2008/10 - 2012/11	BSE	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end

					<ul style="list-style-type: none"> - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/10 - 2010/05	CCSA	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

2010/05 - 2012/11	CMXA	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW					
Golf VI [5K1] - Golf VI 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance

2008/10 - 2012/11	CAXA	1.4	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2012/09 - 2012/11	CTHD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>

VW Golf VI [5K1] - Golf VI 1.6 BiFuel					
Year	Engine	Liters	HP	System	Functions
2008/11 - 2012/11	CHGA	1.6	98 - 102	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Golf VI [5K1] - Golf VI 1.6 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor

2009/02 - 2012/11	CAYB	1.6	90	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/12 - 2012/11	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p>

					<ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf VI [5K1] - Golf VI 2.0 TDI

Year	Engine	Liters	HP	System	Functions
2008/10 - 2009/05	CBDC	2.0	110	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed

2008/10 - 2009/11	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2009/04 - 2010/05	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET

					<ul style="list-style-type: none"> - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2009/11 - 2012/11	CFGB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed

<p>2009/09 - 2012/11</p>	<p>CJAA</p>	<p>2.0</p>	<p>140</p>	<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
<p>2010/05 - 2012/11</p>	<p>CLCA</p>	<p>2.0</p>	<p>110</p>	<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC

					<ul style="list-style-type: none"> - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf VI [5K1] - Golf VI 2.0 GTI

Year	Engine	Liters	HP	System	Functions
2009/04 - 2012/11	CCZB	2.0	211	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

2009/07 -	CBFA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2011/05 - 2012/11	CDLG	2.0	235	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed

					<ul style="list-style-type: none"> - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <ul style="list-style-type: none"> • Actuators
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VW Golf VI [5K1] - Golf VI 2.0 TDI 4Motion					
Year	Engine	Liters	HP	System	Functions
2008/10 - 2009/11	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <ul style="list-style-type: none"> • Actuators

2009/11 - 2012/11	CFFB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW					
Golf VI [5K1] - Golf VI 1.2 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance +

2009/05 - 2012/11	CBZB	1.2	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2010/05 - 2012/11	CBZA	1.2	86	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating

					<ul style="list-style-type: none"> - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Golf VI [5K1] - Golf VI 2.0 TSI 4Motion

Year	Engine	Liters	HP	System	Functions
2009/11 - 2012/11	CDLC	2.0	256	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system

2009/11 - 2011/05	CDLA	2.0	265	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf VI [5K1] - Golf VI 2.5					
Year	Engine	Liters	HP	System	Functions
2009/06 -	CBTA	2.5	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature

					<ul style="list-style-type: none"> - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf VI [5K1] - Golf VI 1.6 TDI 4Motion

Year	Engine	Liters	HP	System	Functions
2008/12 - 2012/11	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>

VW Golf VI [5K1] - Golf VI 1.8 TSI

Year	Engine	Liters	HP	System	Functions
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2009/06 - 2011/01	CDA	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW					
Golf VI [5K1] - Golf VI 2.0 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance +

2011/09 -	CRZA	2.0	260	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf VI [AJ5] Variant - Golf VI 1.2 TSI Variant					
Year	Engine	Liters	HP	System	Functions
2009/08 -	CBZB	1.2	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor

					<ul style="list-style-type: none"> - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2010/07 -	CBZA	1.2	86	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Golf VI [AJ5] Variant - Golf VI 2.0 TDI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed

2009/07 -	CBDB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2009/07 - 2010/09	CBDA	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature

					<ul style="list-style-type: none"> - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2010/01 -	CLCA	2.0	110	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control

2010/07 -	CFHB	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2010/09 -	CJAA	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel

					<ul style="list-style-type: none"> - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf VI [AJ5] Variant - Golf VI 1.6 Variant

Year	Engine	Liters	HP	System	Functions
2009/07 -	BSE	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply

2010/07 -	CMXA	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf VI [AJ5] Variant - Golf VI 1.4 Variant					
Year	Engine	Liters	HP	System	Functions
2009/07 -	BUD	1.4	80	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end

					<ul style="list-style-type: none"> - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW						Golf VI [AJ5] Variant - Golf VI 1.4 TSI Variant					
Year	Engine	Liters	HP	System	Functions						
2009/06 -	CAXA	1.4	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating 						

					<ul style="list-style-type: none"> - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2009/07 -	CAVD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance -

2012/07 -	CTHD	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Golf VI [AJ5] Variant - Golf VI 1.6 TDI Variant					
Year	Engine	Liters	HP	System	Functions
2009/07 -	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake

					<ul style="list-style-type: none"> - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2009/12 -	CAYB	1.6	90	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Golf VI [AJ5] Variant - Golf VI 2.0 TSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control

2009/07 -	CCZA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Golf VI [AJ5] Variant - Golf VI 1.6 TDI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
2009/07 -	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position

					<ul style="list-style-type: none"> - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <ul style="list-style-type: none"> • Actuators
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VW Golf VII [5G1] - Golf VII 1.2 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front <ul style="list-style-type: none"> - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side side <ul style="list-style-type: none"> - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front <ul style="list-style-type: none"> - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side side <ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value value <ul style="list-style-type: none"> - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value

2012/11
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CJZA

1.2

105

Airbag
Airbag AB 20 UDS

- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1

				<ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side 2 - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front

2012/08 -	CJZB	1.2	86	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value
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- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit
- Driver side front airbag ignition circuit 1: Ohm value
- Driver side seat position sensor status
- Passenger side front seat position sensor status
- Supply voltage status
- Rear driver side side airbag ignition circuit
- Rear passenger side side airbag ignition circuit
- Passenger side front airbag ignition circuit 1: Ohm value
- Seat belt lock switch center 2 row
- 2nd row, driver side, buckle switch
- 2nd row, passenger side, buckle switch
- Ignition circuit, Battery disconnection
- 3rd row driver side buckle switch
- 3rd row passenger side buckle switch
- Seat occupied sensor fault status
- Ignition circuit 2, belt tensioner, front driver side

					<p>2</p> <ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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VW Golf VII [5G1] - Golf VII 1.4 TSI

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value

2012/08
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CHPA

1.4

140

Airbag
Airbag AB 20 UDS

- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3

				<ul style="list-style-type: none"> - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side 2 - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front

2012/11 -	CMBA	1.4	122	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status
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- Right belt tensioner fault status
 - Driver side rollover protection trigger
 - Passenger side rollover protection trigger
 - Passenger side rollover protection trigger: Ohm value
 - Driver side rollover protection trigger: Ohm value
 - Right belt tensioner: Terminal 15
 - Right belt tensioner: Power supply
 - Right belt tensioner: Current input
 - Left belt tensioner: Current input
 - Left belt tensioner: Terminal 15
 - Left belt tensioner: Power supply
 - Left belt tensioner: Temperature
 - Right belt tensioner: Temperature
 - Left belt tensioner: tensioning cycle characteristic 1
 - Left belt tensioner: tensioning cycle characteristic 2
 - Left belt tensioner: tensioning cycle characteristic 3
 - Left belt tensioner: tensioning cycle characteristic 4
 - Right belt tensioner: tensioning cycle characteristic 1
 - Right belt tensioner: tensioning cycle characteristic 2
 - Right belt tensioner: tensioning cycle characteristic 3
 - Right belt tensioner: tensioning cycle characteristic 4
 - Driving profile selection functional status
 - Driving profile switching
 - HV battery ignition circuit open circuit
 - HV battery ignition circuit open circuit ohm value
 - Passenger side airbag exhaust valve ignition circuit
 - Passenger side airbag exhaust valve ign.circuit ohm value
 - Status: Key-operated switch contact 1
 - Status: Key-operated switch contact 2
 - Driver side rear belt tensioner ignition circuit
 - Passenger side rear belt tensioner ignition circuit
 - Driver side pedestrian protection trigger ignition circuit
 - Passenger side pedestrian protection trigger ignition circuit
 - Driver side front airbag ignition circuit 1: Ohm value
 - Driver side seat position sensor status
 - Passenger side front seat position sensor status
 - Supply voltage status
 - Rear driver side side airbag ignition circuit
 - Rear passenger side side airbag ignition circuit
 - Passenger side front airbag ignition circuit 1: Ohm value
 - Seat belt lock switch center 2 row
 - 2nd row, driver side, buckle switch
 - 2nd row, passenger side, buckle switch
 - Ignition circuit, Battery disconnection
 - 3rd row driver side buckle switch
 - 3rd row passenger side buckle switch
 - Seat occupied sensor fault status
 - Ignition circuit 2, belt tensioner, front driver side
 - 2
 - Ignition circuit 2, belt tensioner, front passenger side
- **Actuators**

					<ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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VW Golf VII [5G1] - Golf VII 1.4 TSI ACT

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front <ul style="list-style-type: none"> - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front <ul style="list-style-type: none"> - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side <ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance <ul style="list-style-type: none"> - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm

2012/08 -	CPTA	1.4	140	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit
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					<ul style="list-style-type: none"> - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side • Actuators - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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VW					Golf VII [5G1] - Golf VII 1.6 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front 	

2012/08
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CLHA

1.6

105

Airbag
Airbag AB 20 UDS

- Ignition circuit pretensioner front passenger side front
- Seat belt lock switch driver seat front
- Seat belt lock switch front passenger seat
- Ignition circuit 2 Front airbag driver side
- Ignition circuit 2 Front airbag front passenger side
- Ignition circuit seat belt strength limiter front driver's side
- Ignition circuit seat belt strength limiter front passenger's side
- Driver side pedestrian protection ign.circuit resistance
- Passenger side pedestrian protection ign.circuit resistance
- Resistance key switch, contact 1
- Resistance key switch, contact 2
- Driver side front airbag ignition circuit 2: Ohm value
- Passenger side front airbag ignition circuit 2: Ohm value
- Driver side front side airbag ignition circuit: Ohm value
- Passenger side front side airbag ignition circuit: Ohm value
- Driver side rear side airbag ignition circuit: Ohm value
- Passenger side rear side airbag ignition circuit: Ohm value
- Driver side windowbag ignition circuit: Ohm value
- Passenger side windowbag ignition circuit: Ohm value
- Driver side front kneebag ignition circuit: Ohm value
- Passenger side front kneebag ignition circuit: Ohm value
- Driver side front belt tensioner ign.circuit: Ohm value
- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status

- Right belt tensioner fault status
 - Driver side rollover protection trigger
 - Passenger side rollover protection trigger
 - Passenger side rollover protection trigger: Ohm value
 - Driver side rollover protection trigger: Ohm value
 - Right belt tensioner: Terminal 15
 - Right belt tensioner: Power supply
 - Right belt tensioner: Current input
 - Left belt tensioner: Current input
 - Left belt tensioner: Terminal 15
 - Left belt tensioner: Power supply
 - Left belt tensioner: Temperature
 - Right belt tensioner: Temperature
 - Left belt tensioner: tensioning cycle characteristic 1
 - Left belt tensioner: tensioning cycle characteristic 2
 - Left belt tensioner: tensioning cycle characteristic 3
 - Left belt tensioner: tensioning cycle characteristic 4
 - Right belt tensioner: tensioning cycle characteristic 1
 - Right belt tensioner: tensioning cycle characteristic 2
 - Right belt tensioner: tensioning cycle characteristic 3
 - Right belt tensioner: tensioning cycle characteristic 4
 - Driving profile selection functional status
 - Driving profile switching
 - HV battery ignition circuit open circuit
 - HV battery ignition circuit open circuit ohm value
 - Passenger side airbag exhaust valve ignition circuit
 - Passenger side airbag exhaust valve ign.circuit ohm value
 - Status: Key-operated switch contact 1
 - Status: Key-operated switch contact 2
 - Driver side rear belt tensioner ignition circuit
 - Passenger side rear belt tensioner ignition circuit
 - Driver side pedestrian protection trigger ignition circuit
 - Passenger side pedestrian protection trigger ignition circuit
 - Driver side front airbag ignition circuit 1: Ohm value
 - Driver side seat position sensor status
 - Passenger side front seat position sensor status
 - Supply voltage status
 - Rear driver side side airbag ignition circuit
 - Rear passenger side side airbag ignition circuit
 - Passenger side front airbag ignition circuit 1: Ohm value
 - Seat belt lock switch center 2 row
 - 2nd row, driver side, buckle switch
 - 2nd row, passenger side, buckle switch
 - Ignition circuit, Battery disconnection
 - 3rd row driver side buckle switch
 - 3rd row passenger side buckle switch
 - Seat occupied sensor fault status
 - Ignition circuit 2, belt tensioner, front driver side
 - Ignition circuit 2, belt tensioner, front passenger side
- **Actuators**

					<ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front <ul style="list-style-type: none"> - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side side <ul style="list-style-type: none"> - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front <ul style="list-style-type: none"> - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front <ul style="list-style-type: none"> - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side side <ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side resistance <ul style="list-style-type: none"> - Driver side pedestrian protection ign.circuit - Passenger side pedestrian protection ign.circuit resistance <ul style="list-style-type: none"> - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value value <ul style="list-style-type: none"> - Passenger side front airbag ignition circuit 2: Ohm value value <ul style="list-style-type: none"> - Driver side front side airbag ignition circuit: Ohm value value <ul style="list-style-type: none"> - Passenger side front side airbag ignition circuit: Ohm value value <ul style="list-style-type: none"> - Driver side rear side airbag ignition circuit: Ohm value value <ul style="list-style-type: none"> - Passenger side rear side airbag ignition circuit: Ohm value value <ul style="list-style-type: none"> - Driver side windowbag ignition circuit: Ohm value value <ul style="list-style-type: none"> - Passenger side windowbag ignition circuit: Ohm value value <ul style="list-style-type: none"> - Driver side front kneebag ignition circuit: Ohm value value <ul style="list-style-type: none"> - Passenger side front kneebag ignition circuit: Ohm value value <ul style="list-style-type: none"> - Driver side front belt tensioner ign.circuit: Ohm value

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- Passenger side front belt tensioner ign.circuit: Ohm value
- Ignition circuit 2,belt tensioner,front driver side:Ohm value
- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value

					<ul style="list-style-type: none"> - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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VW Golf VII [5G1] - Golf VII 1.6 TDI 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat

2012/11 -	CLHA	1.6	105	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm
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value

- Driver side rollover protection trigger: Ohm

value

- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle

characteristic 1

- Left belt tensioner: tensioning cycle

characteristic 2

- Left belt tensioner: tensioning cycle

characteristic 3

- Left belt tensioner: tensioning cycle

characteristic 4

- Right belt tensioner: tensioning cycle

characteristic 1

- Right belt tensioner: tensioning cycle

characteristic 2

- Right belt tensioner: tensioning cycle

characteristic 3

- Right belt tensioner: tensioning cycle

characteristic 4

- Driving profile selection functional status

- Driving profile switching

- HV battery ignition circuit open circuit

- HV battery ignition circuit open circuit ohm value

- Passenger side airbag exhaust valve ignition

circuit

- Passenger side airbag exhaust valve ign.circuit

ohm value

- Status: Key-operated switch contact 1

- Status: Key-operated switch contact 2

- Driver side rear belt tensioner ignition circuit

- Passenger side rear belt tensioner ignition circuit

- Driver side pedestrian protection trigger ignition

circuit

- Passenger side pedestrian protection trigger

ignition circuit

- Driver side front airbag ignition circuit 1: Ohm

value

- Driver side seat position sensor status

- Passenger side front seat position sensor status

- Supply voltage status

- Rear driver side side airbag ignition circuit

- Rear passenger side side airbag ignition circuit

- Passenger side front airbag ignition circuit 1:

Ohm value

- Seat belt lock switch center 2 row

- 2nd row, driver side, buckle switch

- 2nd row, passenger side, buckle switch

- Ignition circuit, Battery disconnection

- 3rd row driver side buckle switch

- 3rd row passenger side buckle switch

- Seat occupied sensor fault status

- Ignition circuit 2, belt tensioner, front driver side

2

- Ignition circuit 2, belt tensioner, front passenger

side

• **Actuators**

- Failure lamp

- Collision signal

- Airbag indicator light OFF

- Activate component protection

					<ul style="list-style-type: none"> - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value

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- Ignition circuit 2,belt tensioner,front pass. side:Ohm value
- Driver side front belt force limiter ign.circuit: Ohm value
- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit

					<ul style="list-style-type: none"> - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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VW Golf VII [5G1] - Golf VII 2.0 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side - Ignition circuit seat belt strength limiter front driver's side

2012/11 -	CRBC	2.0	150	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply
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					<ul style="list-style-type: none"> - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side 2 - Ignition circuit 2, belt tensioner, front passenger side 2 • Actuators - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
					• Identification

- **Clear errors**
 - **Error memory**
 - **Current values**
 - Data registration
 - Seat occupation detection
 - Power supply Clamp 15
 - Key switch position
 - Ignition circuit windowbag driver's side
 - Ignition circuit windowbag front passenger's side
 - Seat allocation detection front passenger side
- front
- Ignition circuit 1 Front airbag driver side
 - Ignition circuit 1 Front airbag front passenger side
- side
- Pass. side knee airbag, ign. circuit
 - Ignition circuit knee bag driver's side front
 - Ignition circuit side airbag driver side front
 - Ignition circuit side airbag front passenger side
- front
- Ignition circuit pretensioner driver side front
 - Ignition circuit pretensioner front passenger side
- front
- Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Ignition circuit 2 Front airbag driver side
 - Ignition circuit 2 Front airbag front passenger side
- side
- Ignition circuit seat belt strength limiter front driver's side
 - Ignition circuit seat belt strength limiter front passenger's side
 - Driver side pedestrian protection ign.circuit resistance
 - Passenger side pedestrian protection ign.circuit resistance
 - Resistance key switch, contact 1
 - Resistance key switch, contact 2
 - Driver side front airbag ignition circuit 2: Ohm value
 - Passenger side front airbag ignition circuit 2: Ohm value
 - Driver side front side airbag ignition circuit: Ohm value
 - Passenger side front side airbag ignition circuit: Ohm value
 - Driver side rear side airbag ignition circuit: Ohm value
 - Passenger side rear side airbag ignition circuit: Ohm value
 - Driver side windowbag ignition circuit: Ohm value
 - Passenger side windowbag ignition circuit: Ohm value
 - Driver side front kneebag ignition circuit: Ohm value
 - Passenger side front kneebag ignition circuit: Ohm value
 - Driver side front belt tensioner ign.circuit: Ohm value
 - Passenger side front belt tensioner ign.circuit: Ohm value
 - Ignition circuit 2,belt tensioner,front driver side:Ohm value
 - Ignition circuit 2,belt tensioner,front pass. side:Ohm value
 - Driver side front belt force limiter ign.circuit: Ohm value
 - Passenger side front belt force limiter ign.circuit:

2012/08 -	CRBB	2.0	143	Airbag Airbag AB 20 UDS	<p>Ohm value</p> <ul style="list-style-type: none"> - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value <p>Ohm value</p> <ul style="list-style-type: none"> - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value <p>Current value</p> <ul style="list-style-type: none"> - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value <p>value</p> <ul style="list-style-type: none"> - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm
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					<p>value</p> <ul style="list-style-type: none"> - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: <p>Ohm value</p> <ul style="list-style-type: none"> - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side <p>2</p> <ul style="list-style-type: none"> - Ignition circuit 2, belt tensioner, front passenger side <p>• Actuators</p> <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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VW Golf VII [5G1] - Golf VII 1.4 TSI MultiFuel					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Data registration - Seat occupation detection - Power supply Clamp 15 - Key switch position - Ignition circuit windowbag driver's side - Ignition circuit windowbag front passenger's side - Seat allocation detection front passenger side front - Ignition circuit 1 Front airbag driver side - Ignition circuit 1 Front airbag front passenger side - Pass. side knee airbag, ign. circuit - Ignition circuit knee bag driver's side front - Ignition circuit side airbag driver side front - Ignition circuit side airbag front passenger side front - Ignition circuit pretensioner driver side front - Ignition circuit pretensioner front passenger side front - Seat belt lock switch driver seat front - Seat belt lock switch front passenger seat - Ignition circuit 2 Front airbag driver side - Ignition circuit 2 Front airbag front passenger side - Ignition circuit seat belt strength limiter front driver's side - Ignition circuit seat belt strength limiter front passenger's side - Driver side pedestrian protection ign.circuit resistance

2012/11 -	CPVA	1.4	122	Airbag Airbag AB 20 UDS	<ul style="list-style-type: none"> - Passenger side pedestrian protection ign.circuit resistance - Resistance key switch, contact 1 - Resistance key switch, contact 2 - Driver side front airbag ignition circuit 2: Ohm value - Passenger side front airbag ignition circuit 2: Ohm value - Driver side front side airbag ignition circuit: Ohm value - Passenger side front side airbag ignition circuit: Ohm value - Driver side rear side airbag ignition circuit: Ohm value - Passenger side rear side airbag ignition circuit: Ohm value - Driver side windowbag ignition circuit: Ohm value - Passenger side windowbag ignition circuit: Ohm value - Driver side front kneebag ignition circuit: Ohm value - Passenger side front kneebag ignition circuit: Ohm value - Driver side front belt tensioner ign.circuit: Ohm value - Passenger side front belt tensioner ign.circuit: Ohm value - Ignition circuit 2,belt tensioner,front driver side:Ohm value - Ignition circuit 2,belt tensioner,front pass. side:Ohm value - Driver side front belt force limiter ign.circuit: Ohm value - Passenger side front belt force limiter ign.circuit: Ohm value - Driver side rear belt tensioner ign.circuit: Ohm value - Passenger side rear belt tensioner ign.circuit: Ohm value - Battery isolator ignition circuit: Ohm value - Driver side front seat position sensor: Current value - Passenger side front seat position sensor: Current value - Driver side 2nd row belt switch: Ohm value - Passenger side 2nd row belt switch: Ohm value - 2nd row center belt switch: Ohm value - Driver side 3rd row belt switch: Ohm value - Passenger side 3rd row belt switch: Ohm value - Driver side front buckle switch: Ohm value - Passenger side front buckle switch: Ohm value - Seat occupied sensor: Ohm value - Driving profile selection system status - Left belt tensioner fault status - Right belt tensioner fault status - Driver side rollover protection trigger - Passenger side rollover protection trigger - Passenger side rollover protection trigger: Ohm value - Driver side rollover protection trigger: Ohm value - Right belt tensioner: Terminal 15 - Right belt tensioner: Power supply - Right belt tensioner: Current input - Left belt tensioner: Current input - Left belt tensioner: Terminal 15 - Left belt tensioner: Power supply
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					<ul style="list-style-type: none"> - Left belt tensioner: Temperature - Right belt tensioner: Temperature - Left belt tensioner: tensioning cycle characteristic 1 - Left belt tensioner: tensioning cycle characteristic 2 - Left belt tensioner: tensioning cycle characteristic 3 - Left belt tensioner: tensioning cycle characteristic 4 - Right belt tensioner: tensioning cycle characteristic 1 - Right belt tensioner: tensioning cycle characteristic 2 - Right belt tensioner: tensioning cycle characteristic 3 - Right belt tensioner: tensioning cycle characteristic 4 - Driving profile selection functional status - Driving profile switching - HV battery ignition circuit open circuit - HV battery ignition circuit open circuit ohm value - Passenger side airbag exhaust valve ignition circuit - Passenger side airbag exhaust valve ign.circuit ohm value - Status: Key-operated switch contact 1 - Status: Key-operated switch contact 2 - Driver side rear belt tensioner ignition circuit - Passenger side rear belt tensioner ignition circuit - Driver side pedestrian protection trigger ignition circuit - Passenger side pedestrian protection trigger ignition circuit - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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VW					Golf VII [5G1] - Golf VII 2.0 TDI 4Motion	
Year	Engine	Liters	HP	System	Functions	

- **Identification**
- **Clear errors**
- **Error memory**
- **Current values**
 - Data registration
 - Seat occupation detection
 - Power supply Clamp 15
 - Key switch position
 - Ignition circuit windowbag driver's side
 - Ignition circuit windowbag front passenger's side
 - Seat allocation detection front passenger side
- front
 - Ignition circuit 1 Front airbag driver side
 - Ignition circuit 1 Front airbag front passenger side
- side
 - Pass. side knee airbag, ign. circuit
 - Ignition circuit knee bag driver's side front
 - Ignition circuit side airbag driver side front
 - Ignition circuit side airbag front passenger side
- front
 - Ignition circuit pretensioner driver side front
 - Ignition circuit pretensioner front passenger side
- front
 - Seat belt lock switch driver seat front
 - Seat belt lock switch front passenger seat
 - Ignition circuit 2 Front airbag driver side
 - Ignition circuit 2 Front airbag front passenger side
- side
 - Ignition circuit seat belt strength limiter front driver's side
 - Ignition circuit seat belt strength limiter front passenger's side
 - Driver side pedestrian protection ign.circuit resistance
 - Passenger side pedestrian protection ign.circuit resistance
 - Resistance key switch, contact 1
 - Resistance key switch, contact 2
 - Driver side front airbag ignition circuit 2: Ohm value
 - Passenger side front airbag ignition circuit 2: Ohm value
 - Driver side front side airbag ignition circuit: Ohm value
 - Passenger side front side airbag ignition circuit: Ohm value
 - Driver side rear side airbag ignition circuit: Ohm value
 - Passenger side rear side airbag ignition circuit: Ohm value
 - Driver side windowbag ignition circuit: Ohm value
 - Passenger side windowbag ignition circuit: Ohm value
 - Driver side front kneebag ignition circuit: Ohm value
 - Passenger side front kneebag ignition circuit: Ohm value
 - Driver side front belt tensioner ign.circuit: Ohm value
 - Passenger side front belt tensioner ign.circuit: Ohm value
 - Ignition circuit 2,belt tensioner,front driver side:Ohm value
 - Ignition circuit 2,belt tensioner,front pass. side:Ohm value
 - Driver side front belt force limiter ign.circuit: Ohm value

2012/11
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CRLB

2.0

150

Airbag
Airbag AB 20 UDS

- Passenger side front belt force limiter ign.circuit: Ohm value
- Driver side rear belt tensioner ign.circuit: Ohm value
- Passenger side rear belt tensioner ign.circuit: Ohm value
- Battery isolator ignition circuit: Ohm value
- Driver side front seat position sensor: Current value
- Passenger side front seat position sensor: Current value
- Driver side 2nd row belt switch: Ohm value
- Passenger side 2nd row belt switch: Ohm value
- 2nd row center belt switch: Ohm value
- Driver side 3rd row belt switch: Ohm value
- Passenger side 3rd row belt switch: Ohm value
- Driver side front buckle switch: Ohm value
- Passenger side front buckle switch: Ohm value
- Seat occupied sensor: Ohm value
- Driving profile selection system status
- Left belt tensioner fault status
- Right belt tensioner fault status
- Driver side rollover protection trigger
- Passenger side rollover protection trigger
- Passenger side rollover protection trigger: Ohm value
- Driver side rollover protection trigger: Ohm value
- Right belt tensioner: Terminal 15
- Right belt tensioner: Power supply
- Right belt tensioner: Current input
- Left belt tensioner: Current input
- Left belt tensioner: Terminal 15
- Left belt tensioner: Power supply
- Left belt tensioner: Temperature
- Right belt tensioner: Temperature
- Left belt tensioner: tensioning cycle characteristic 1
- Left belt tensioner: tensioning cycle characteristic 2
- Left belt tensioner: tensioning cycle characteristic 3
- Left belt tensioner: tensioning cycle characteristic 4
- Right belt tensioner: tensioning cycle characteristic 1
- Right belt tensioner: tensioning cycle characteristic 2
- Right belt tensioner: tensioning cycle characteristic 3
- Right belt tensioner: tensioning cycle characteristic 4
- Driving profile selection functional status
- Driving profile switching
- HV battery ignition circuit open circuit
- HV battery ignition circuit open circuit ohm value
- Passenger side airbag exhaust valve ignition circuit
- Passenger side airbag exhaust valve ign.circuit ohm value
- Status: Key-operated switch contact 1
- Status: Key-operated switch contact 2
- Driver side rear belt tensioner ignition circuit
- Passenger side rear belt tensioner ignition circuit
- Driver side pedestrian protection trigger ignition circuit
- Passenger side pedestrian protection trigger ignition circuit

					<ul style="list-style-type: none"> - Driver side front airbag ignition circuit 1: Ohm value - Driver side seat position sensor status - Passenger side front seat position sensor status - Supply voltage status - Rear driver side side airbag ignition circuit - Rear passenger side side airbag ignition circuit - Passenger side front airbag ignition circuit 1: Ohm value - Seat belt lock switch center 2 row - 2nd row, driver side, buckle switch - 2nd row, passenger side, buckle switch - Ignition circuit, Battery disconnection - 3rd row driver side buckle switch - 3rd row passenger side buckle switch - Seat occupied sensor fault status - Ignition circuit 2, belt tensioner, front driver side - Ignition circuit 2, belt tensioner, front passenger side • Actuators <ul style="list-style-type: none"> - Failure lamp - Collision signal - Airbag indicator light OFF - Activate component protection - Crash signal/all belt tensioners - Anti-roll bar triggering - Vehicle conditioning
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VW Passat [357] CC - Passat 3.6 FSI CC 4Motion					
Year	Engine	Liters	HP	System	Functions
2008/08 - 2012/05	BWS	3.6	299	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch.

					<ul style="list-style-type: none"> module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/05 - 2010/11	BLV	3.6	280	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>

VW Passat [357] CC - Passat 1.8 TSI CC					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed

2008/05 - 2010/05	BZB	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/11 - 2012/05	CDAA	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET

					<ul style="list-style-type: none"> - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2009/11 - 2012/01	CDAB	1.8	152	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed

2008/11 - 2009/11	CGYA	1.8	152	Cruise control ACC 3.1	<ul style="list-style-type: none"> - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Passat [357] CC - Passat 2.0 TDI CC					
Year	Engine	Liters	HP	System	Functions
2008/05 - 2010/11	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end

					<ul style="list-style-type: none"> - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/08 - 2010/11	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory

2009/05 - 2010/11	CBAC	2.0	143	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
2010/11 - 2012/05	CFFA	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance

					<ul style="list-style-type: none"> - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [357] CC - Passat 2.0 TSI CC					
Year	Engine	Liters	HP	System	Functions
2008/05 - 2010/12	CAWB	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>

2008/08 - 2012/01	CCTA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration
2008/05 - 2012/05	CBFA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end

					<ul style="list-style-type: none"> - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2009/11 - 2010/11	CCZA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification

2010/11 - 2012/05	CCZB	2.0	211	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Passat [357] CC - Passat 3.6 FSI CC					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance +

2008/05 - 2010/11	BLV	3.6	280	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [357] CC - Passat 2.0 TDI CC 4Motion					
Year	Engine	Liters	HP	System	Functions
2009/11 - 2010/11	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor

					<ul style="list-style-type: none"> - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2010/11 - 2012/05	CFFB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>

VW Passat [357] CC - Passat 1.4 TSI CC					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed

2011/01 - 2012/05	CKMA	1.4	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [362] - Passat 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded

2010/08

CAXA

1.4

122

loaded

- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display

				<ul style="list-style-type: none"> - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
				<ul style="list-style-type: none"> • Identification

- **Clear errors**
- **Adjustments / settings**
 - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - CAN communication
 - Supply voltage term.30
 - Tire pressure monitoring status
 - Transportation mode
 - System status
 - Inflation pressure sensor 1 Temperature
 - Inflation pressure sensor 2 Temperature
 - Inflation pressure sensor 3 Temperature
 - Inflation pressure sensor 4 Temperature
 - Inflation pressure sensor 1 Sensor code
 - Inflation pressure sensor 2 Sensor code
 - Inflation pressure sensor 3 Sensor code
 - Inflation pressure sensor 4 Sensor code
 - Radio interference
 - Load status selected
 - Warning: Check front left tire pressure
 - Warning: Check front right tire pressure
 - Tire pressure sensor 1: Actual pressure
 - Tire pressure sensor 1: Specified pressure
 - Tire pressure sensor 1: Wheel position
 - Tire pressure sensor 2: Actual pressure
 - Tire pressure sensor 2: Specified pressure
 - Tire pressure sensor 2: Wheel position
 - Tire pressure sensor 3: Actual pressure
 - Tire pressure sensor 3: Specified pressure
 - Tire pressure sensor 3: Wheel position
 - Designation wheel set 1
 - Designation wheel set 2
 - Designation wheel set 3
 - Designation wheel set 4
 - Designation wheel set 5
 - Designation wheel set 6
 - Designation wheel set 7
 - Designation wheel set 8
 - Designation wheel set 9
 - Designation wheel set 10
 - Currently monitored wheel set
 - Designation of currently monitored wheel set
 - Warning: Front left tire flat
 - Warning: Front right tire flat
 - Warning: Rear left tire flat
 - Warning: Rear right tire flat
 - Designation wheel set 11
 - Vehicle speed CAN message
 - CAN message voltage terminal 30
 - Tire pressure sensor: Last actual temperature received
 - Tire pressure sensor: Last actual pressure received
 - Tire pressure monitor sensor: Last wheel position received
 - Tire pressure monitor sensor: Last sensor code received
 - Tire pressure sensor 4: Actual pressure
 - Tire pressure sensor 4: Specified pressure
 - Tire pressure sensor 4: Wheel position
 - Wheel set 1 specified pressure, front axle, partially loaded
 - Wheel set 1 specified pressure, front axle, fully loaded
 - Wheel set 1 specified pressure, rear axle,

2010/11	CKMA	1.4	160	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle,
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	<ul style="list-style-type: none"> partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance

			<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9

Tire control system
Tire pressure monitor 4.0

- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded

2012/11 -	CTHD	1.4	160	<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure
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					<ul style="list-style-type: none"> - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			Cruise control ACC 3.1		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW					Passat [362] - Passat 1.4 TSI EcoFuel	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode 	

- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded

2010/09

CDGA

1.4

150

Tire control system
Tire pressure monitor 4.0

- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded

	<ul style="list-style-type: none"> - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC

					<ul style="list-style-type: none"> - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW **Passat [362] - Passat 1.8 FSI**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat

- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded

Tire control system
Tire pressure monitor 4.0

- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW					Passat [362] - Passat 2.0 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature 	

- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle,

2010/11 -	CCZB	2.0	211	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure
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	<ul style="list-style-type: none"> - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor

					<ul style="list-style-type: none"> - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [362] - Passat 1.6 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30

2010/08
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CAYC

1.6

105

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle,

			<p>partially loaded</p> <ul style="list-style-type: none"> - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values

					<ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [362] - Passat 2.0 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference

- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded

2010/08 -	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low
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	<ul style="list-style-type: none"> - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating

					<ul style="list-style-type: none"> - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure

2010/11 -	CLLA	2.0	170	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully
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	<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear left tire speed - rear right tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed +

				<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3

Tire control system
Tire pressure monitor 4.0

- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle,

2012/12 -	CFGC	2.0	177	<ul style="list-style-type: none"> partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified
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					<p>pressure</p> <ul style="list-style-type: none"> - Front right tire pressure sensor specified pressure <p>pressure</p> <ul style="list-style-type: none"> - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure <p>pressure</p> <ul style="list-style-type: none"> - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			Cruise control ACC 3.1		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Passat [362] - Passat 2.0 TDI 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory

• **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded

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CFFB

2.0

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Tire control system
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded

	<ul style="list-style-type: none"> - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end

				<ul style="list-style-type: none"> - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat

- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded

Tire control system
Tire pressure monitor 4.0

- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

				<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code

- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle,

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CFGC

2.0

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Tire control system
Tire pressure monitor 4.0

- partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- partially loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- partially loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- partially loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- partially loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- partially loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- partially loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- partially loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- partially loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- partially loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- partially loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- partially loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- partially loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- partially loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- partially loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- partially loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low

	<ul style="list-style-type: none"> - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel

					<ul style="list-style-type: none"> - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW **Passat [362] - Passat 3.6 V6 4Motion**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel

2011/01 -	BWS	3.6	299	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded
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				<ul style="list-style-type: none"> - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed

					<ul style="list-style-type: none"> - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [362] - Passat 1.8 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded

2011/02
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CDAB

1.8

152

- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set

			<ul style="list-style-type: none"> - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
		<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure

2012/01

CDA

1.8

160

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded

	<ul style="list-style-type: none"> - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management

					<p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [365] Alltrack - Passat 2.0 TDI Alltrack					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully

2012/01

CFFB

2.0

140

loaded

- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position

					<ul style="list-style-type: none"> - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			Cruise control ACC 3.1		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW					Passat [365] Alltrack - Passat 2.0 TDI Alltrack 4Motion	
Year	Engine	Liters	HP	System	Functions	

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - CAN communication
 - Supply voltage term.30
 - Tire pressure monitoring status
 - Transportation mode
 - System status
 - Inflation pressure sensor 1 Temperature
 - Inflation pressure sensor 2 Temperature
 - Inflation pressure sensor 3 Temperature
 - Inflation pressure sensor 4 Temperature
 - Inflation pressure sensor 1 Sensor code
 - Inflation pressure sensor 2 Sensor code
 - Inflation pressure sensor 3 Sensor code
 - Inflation pressure sensor 4 Sensor code
 - Radio interference
 - Load status selected
 - Warning: Check front left tire pressure
 - Warning: Check front right tire pressure
 - Tire pressure sensor 1: Actual pressure
 - Tire pressure sensor 1: Specified pressure
 - Tire pressure sensor 1: Wheel position
 - Tire pressure sensor 2: Actual pressure
 - Tire pressure sensor 2: Specified pressure
 - Tire pressure sensor 2: Wheel position
 - Tire pressure sensor 3: Actual pressure
 - Tire pressure sensor 3: Specified pressure
 - Tire pressure sensor 3: Wheel position
 - Designation wheel set 1
 - Designation wheel set 2
 - Designation wheel set 3
 - Designation wheel set 4
 - Designation wheel set 5
 - Designation wheel set 6
 - Designation wheel set 7
 - Designation wheel set 8
 - Designation wheel set 9
 - Designation wheel set 10
 - Currently monitored wheel set
 - Designation of currently monitored wheel set
 - Warning: Front left tire flat
 - Warning: Front right tire flat
 - Warning: Rear left tire flat
 - Warning: Rear right tire flat
 - Designation wheel set 11
 - Vehicle speed CAN message
 - CAN message voltage terminal 30
 - Tire pressure sensor: Last actual temperature received
 - Tire pressure sensor: Last actual pressure received
 - Tire pressure monitor sensor: Last wheel position received
 - Tire pressure monitor sensor: Last sensor code received
 - Tire pressure sensor 4: Actual pressure
 - Tire pressure sensor 4: Specified pressure
 - Tire pressure sensor 4: Wheel position
 - Wheel set 1 specified pressure, front axle, partially loaded
 - Wheel set 1 specified pressure, front axle, fully loaded

2012/01 -	CFFB	2.0	140	<p>Tire control system Tire pressure monitor 4.0</p>	<ul style="list-style-type: none"> - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded
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	<ul style="list-style-type: none"> - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance -

Cruise control
ACC 3.1

- Cruise control/ACC stored speed
- Cruise control/ACC stored distance
- ACC sensor unit actual current, positive end
- ACC sensor unit actual current, negative end
- ACC sensor unit voltage, negative end
- ACC sensor unit voltage, positive end
- Radar object 1 distance
- Radar object 1 relative speed
- Radar object 1 angular position
- (Adaptive) cruise control switch
- Cruise control/ACC button SET
- ACC
- Control unit temperature
- Communication with instrument panel
- Communication with steering column switch.
module
- Commun. with strng. wh. angle sensor
- Communication with el. parking brake
- Communication with gateway
- Communication with transmission control unit
- Cruise control/ACC button Cancel
- ACC lens heating
- Communication with ESP control unit
- ACC CU signal, specif. acceleration

• **Actuators**

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Tire pressure monitor individual specified pressure adjustment

• **Error memory**

• **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8

Tire control system
Tire pressure monitor 4.0

- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded

2013/01 -	CFGC	2.0	177	<ul style="list-style-type: none"> - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure
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					<p>pressure</p> <ul style="list-style-type: none"> - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			Cruise control ACC 3.1		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW						Passat [365] Alltrack - Passat 2.0 TSI Alltrack 4Motion					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status 					

- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded

2012/01 -	CCZB	2.0	211	Tire control system Tire pressure monitor 4.0	<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded
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	<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded <p>loaded</p> <ul style="list-style-type: none"> - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET

					<ul style="list-style-type: none"> - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW **Passat [365] Variant - Passat 1.4 TSI Variant**

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat

- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded

Tire control system
Tire pressure monitor 4.0

- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

				<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference

- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded

2010/11	CKMA	1.4	160	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low
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				<ul style="list-style-type: none"> - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
		<p>Cruise control ACC 3.1</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit

- ACC CU signal, specif. acceleration

• **Actuators**

• **Identification**

• **Clear errors**

• **Adjustments / settings**

- Tire pressure monitor individual specified pressure adjustment

• **Error memory**

• **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position

2012/11 -	CTHD	1.4	160	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded
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	<ul style="list-style-type: none"> - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed +

				<p>Cruise control ACC 3.1</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Passat [365] Variant - Passat 1.4 TSI EcoFuel Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle,

2010/09
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CDGA

1.4

150

- partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure

					<ul style="list-style-type: none"> - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			Cruise control ACC 3.1		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW					Passat [365] Variant - Passat 1.6 TDI Variant	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors 	

• **Adjustments / settings**

- Tire pressure monitor individual specified pressure adjustment

• **Error memory**

• **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded

2010/08
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CAYC

1.6

105

Tire control system
Tire pressure monitor 4.0

- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded

	<ul style="list-style-type: none"> - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance

				<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [365] Variant - Passat 1.8 FSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5

Tire control system
Tire pressure monitor 4.0

- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully

2010/08 -	CDAA	1.8	160	<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified
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					<ul style="list-style-type: none"> pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			Cruise control ACC 3.1		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Passat [365] Variant - Passat 2.0 TDI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed

- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded

2010/08

CFFA

2.0

136

Tire control system
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded

	<ul style="list-style-type: none"> - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed

				<ul style="list-style-type: none"> - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat

2012/12 -	CFGC	2.0	177	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded
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			<ul style="list-style-type: none"> - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			<ul style="list-style-type: none"> • Identification

					<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Passat [365] Variant - Passat 2.0 TDI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code

- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded

2010/08	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low
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	<ul style="list-style-type: none"> - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway

				<ul style="list-style-type: none"> - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received

2012/12 -	CFGC	2.0	177	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle,
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	<ul style="list-style-type: none"> partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor

					<ul style="list-style-type: none"> - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [365] Variant - Passat 2.0 TSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle,

2010/11
-

CCZB

2.0

211

- partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status

				<ul style="list-style-type: none"> - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded

2011/01

BWS

3.6

299

Tire control system
Tire pressure monitor 4.0

- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded

	<ul style="list-style-type: none"> - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME

				<p>Cruise control ACC 3.1</p> <ul style="list-style-type: none"> - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					Passat [365] Variant - Passat 1.8 TSI Variant	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 	

Tire control system
Tire pressure monitor 4.0

- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded

2011/02

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CDAB

1.8

152

loaded

- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure

					<ul style="list-style-type: none"> - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			Cruise control ACC 3.1		<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW					Passat [3C2] - Passat 2.0 TSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values 	

2005/03 - 2005/11	AXX	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
2005/08 - 2007/12	BPY	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed

					<ul style="list-style-type: none"> - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2005/11 - 2008/02	BWA	2.0	200	Cruise control ACC 3.1	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply

2008/05 - 2010/07	CAWB	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
2008/05 - 2010/11	CCTA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position

					<ul style="list-style-type: none"> - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <ul style="list-style-type: none"> • Actuators
2009/11 - 2010/07	CCZA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <ul style="list-style-type: none"> • Actuators

VW

Passat [3C2] - Passat 3.2 FSI 4Motion

Year	Engine	Liters	HP	System	Functions

2005/09 - 2010/07	AXZ	3.2	250	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW					Passat [3C2] - Passat 1.9 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + 	

2005/03 - 2006/02	BKC	1.9	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2005/03 - 2008/11	BLS	1.9	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating

					<ul style="list-style-type: none"> - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2006/02 - 2008/11	BXE	1.9	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>

VW					
Passat [3C2] - Passat 2.0 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system

2005/03 - 2008/06	BKP	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2005/08 - 2008/06	BUZ	2.0	163	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake

					<ul style="list-style-type: none"> - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2005/06 - 2006/02	BVE	2.0	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed +

2006/03 - 2006/05	BMW	2.0	120	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/11 - 2010/11	CBAC	2.0	143	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway

					<ul style="list-style-type: none"> - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/05 - 2010/07	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed -

2008/11 - 2010/07	CBDC	2.0	110	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/05 - 2009/11	CBAA	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit

					<ul style="list-style-type: none"> - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW						Passat [3C2] - Passat 1.6 FSI
Year	Engine	Liters	HP	System	Functions	
2005/03 - 2008/06	BLF	1.6	115	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators 	

VW						Passat [3C2] - Passat 2.0 FSI
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed 	

2005/03 - 2005/11	BLR	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
2005/11 - 2010/07	BVY	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch

					<ul style="list-style-type: none"> - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [3C2] - Passat 2.0 FSI 4Motion					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2005/11	BLX	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors

2005/11 - 2010/07	BVX	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Passat [3C2] - Passat 1.6					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed

2005/03 - 2010/07	BSE	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [3C2] - Passat 2.0 TDI 4Motion					
Year	Engine	Liters	HP	System	Functions
2005/03 - 2008/06	BKP	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway

					<ul style="list-style-type: none"> - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/05 - 2010/08	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed -

2009/05 - 2010/07	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [3C2] - Passat 3.6 FSI 4Motion					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2010/07	BLV	3.6	280	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch.

					module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Passat [3C2] - Passat 3.6 FSI					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2010/07	BLV	3.6	280	Cruise control ACC 3.1	• Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Passat [3C2] - Passat 3.6 FSI R36 4Motion					
Year	Engine	Liters	HP	System	Functions
					• Identification • Clear errors

2007/04 - 2010/07	BWS	3.6	299	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW					
Passat [3C2] - Passat 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed

2007/05 - 2010/07	CAXA	1.4	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [3C2] - Passat 1.4 TSI EcoFuel					
Year	Engine	Liters	HP	System	Functions
2008/11 - 2010/07	CDGA	1.4	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway

					<ul style="list-style-type: none"> - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW **Passat [3C2] - Passat 1.8 TSI**

Year	Engine	Liters	HP	System	Functions
2008/05 - 2010/07	BZB	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor

2009/11 - 2010/07	CDAB	1.8	152	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/11 - 2010/05	CGYA	1.8	152	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch.

					module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW						Passat [3C2] - Passat 1.6 TDI
Year	Engine	Liters	HP	System	Functions	
2009/08 - 2010/07	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators	

VW						Passat [3C2] - Passat 1.8 FSI
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification 	

2009/11 - 2010/07	CDA	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Passat [3C5] Variant - Passat 2.0 TSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance -

2005/08 - 2005/11	AXX	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2005/11 - 2008/02	BWA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit

					<ul style="list-style-type: none"> - ACC CU signal, specif. acceleration • Actuators
2005/08 - 2007/12	BPY	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed

2007/11 - 2010/11	CAWB	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2007/12 - 2010/11	CCTA	2.0	200	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration

<p>2009/11 - 2010/11</p>	<p>CCZA</p>	<p>2.0</p>	<p>200</p>	<p>Cruise control ACC 3.1</p>	<ul style="list-style-type: none"> • Actuators • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
<p>2008/05 -</p>				<p>Cruise control</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end

2010/11	CCTB	2.0	170	ACC 3.1	<ul style="list-style-type: none"> - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [3C5] Variant - Passat 3.2 FSI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
2005/11 - 2010/11	AXZ	3.2	250	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel

- ACC lens heating
- Communication with ESP control unit
- ACC CU signal, specif. acceleration
- **Actuators**

VW					
Passat [3C5] Variant - Passat 1.9 TDI Variant					
Year	Engine	Liters	HP	System	Functions
2005/08 - 2006/02	BKC	1.9	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management

2005/08 - 2008/11	BLS	1.9	105	Cruise control ACC 3.1	<p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2006/02 - 2008/11	BXE	1.9	105	Cruise control ACC 3.1	<p>• Identification</p> <p>• Clear errors</p> <p>• Error memory</p> <p>• Current values</p> <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor

- Communication with el. parking brake
- Communication with gateway
- Communication with transmission control unit
- Cruise control/ACC button Cancel
- ACC lens heating
- Communication with ESP control unit
- ACC CU signal, specif. acceleration
- **Actuators**

VW					
Passat [3C5] Variant - Passat 2.0 TDI Variant					
Year	Engine	Liters	HP	System	Functions
2005/08 - 2008/06	BKP	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed

2005/08 - 2006/02	BVE	2.0	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2006/03 - 2006/05	BWV	2.0	120	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature

					<ul style="list-style-type: none"> - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/01 - 2009/11	CBA	2.0	136	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control

2008/01 - 2010/11	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/11 - 2010/11	CBAC	2.0	143	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch.

					<ul style="list-style-type: none"> module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
2008/05 - 2010/11	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Passat [3C5] Variant - Passat 2.0 TDI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed

2005/08 - 2008/06	BKP	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/05 - 2010/11	CBAB	2.0	140	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch

					<ul style="list-style-type: none"> - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2009/05 - 2010/11	CBBB	2.0	170	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>

VW						Passat [3C5] Variant - Passat 1.6 FSI Variant					
Year	Engine	Liters	HP	System		Functions					
						<ul style="list-style-type: none"> • Identification • Clear errors 					

2005/08 - 2008/06	BLF	1.6	115	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Passat [3C5] Variant - Passat 2.0 FSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed

2005/08 - 2005/11	BLR	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2005/11 - 2010/11	BVY	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management <p>system</p> <ul style="list-style-type: none"> - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration

• Actuators

VW					
Passat [3C5] Variant - Passat 1.6 Variant					
Year	Engine	Liters	HP	System	Functions
2005/08 - 2010/11	BSE	1.6	102	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW					
Passat [3C5] Variant - Passat 2.0 FSI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor

2005/11 - 2010/11	BVX	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2005/09 - 2005/11	BLX	2.0	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch.

					module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Passat [3C5] Variant - Passat 3.6 FSI Variant					
Year	Engine	Liters	HP	System	Functions
2005/09 - 2010/11	BLV	3.6	280	Cruise control ACC 3.1	• Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Passat [3C5] Variant - Passat 3.6 FSI Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
					• Identification • Clear errors

2005/09 - 2010/11	BLV	3.6	280	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Passat [3C5] Variant - Passat 3.6 FSI R36 Variant 4Motion					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed

2007/04 - 2010/11	BWS	3.6	299	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Passat [3C5] Variant - Passat 1.4 TSI Variant					
Year	Engine	Liters	HP	System	Functions
2007/05 - 2010/11	CAXA	1.4	122	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway

					<ul style="list-style-type: none"> - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW Passat [3C5] Variant - Passat 1.8 TSI Variant

Year	Engine	Liters	HP	System	Functions
2007/05 - 2010/11	BZB	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor

2009/11 - 2010/11	CDAB	1.8	152	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. <p>module</p> <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
2008/11 - 2010/11	CGYA	1.8	152	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch.

					module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Passat [3C5] Variant - Passat 1.4 TSI EcoFuel Variant					
Year	Engine	Liters	HP	System	Functions
2008/11 - 2010/11	CDGA	1.4	150	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rear right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module <ul style="list-style-type: none"> - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators

VW Passat [3C5] Variant - Passat 1.6 TDI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification

2009/08 - 2010/11	CAYC	1.6	105	Cruise control ACC 3.1	<ul style="list-style-type: none"> • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance - - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration • Actuators
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VW Passat [3C5] Variant - Passat 1.8 FSI Variant					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Error memory • Current values <ul style="list-style-type: none"> - Power supply - front left tire speed - front right tire speed - rare right tire speed - rear left tire speed - Cruise control - rotation angle sensor - Steering wheel rotation angle sensor - Communication with engine management system - Cruise control/ACC button, speed + - Cruise control/ACC button, speed - - Cruise control/ACC button RESUME - Cruise control/ACC button distance + - Cruise control/ACC button distance -

2009/11 - 2010/11	CDA	1.8	160	Cruise control ACC 3.1	<ul style="list-style-type: none"> - Cruise control/ACC stored speed - Cruise control/ACC stored distance - ACC sensor unit actual current, positive end - ACC sensor unit actual current, negative end - ACC sensor unit voltage, negative end - ACC sensor unit voltage, positive end - Radar object 1 distance - Radar object 1 relative speed - Radar object 1 angular position - (Adaptive) cruise control switch - Cruise control/ACC button SET - ACC - Control unit temperature - Communication with instrument panel - Communication with steering column switch. module - Commun. with strng. wh. angle sensor - Communication with el. parking brake - Communication with gateway - Communication with transmission control unit - Cruise control/ACC button Cancel - ACC lens heating - Communication with ESP control unit - ACC CU signal, specif. acceleration <p>• Actuators</p>
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VW					
Sharan [7N1] - Sharan 1.4 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3

2010/05
-
2012/06

CAVA

1.4

150

Tire control system
Tire pressure monitor 4.0

- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle,

partially loaded

- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified

				<p>pressure</p> <ul style="list-style-type: none"> - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received

2011/10
-
2012/05

CNWB

1.4

150

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded

					<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment

- **Error memory**

- **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle,

2012/05 -	CTHA	1.4	150	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle,
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					<ul style="list-style-type: none"> partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW					
Sharan [7N1] - Sharan 2.0 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature

- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle,

2010/05 -	CFFA	2.0	136	Tire control system Tire pressure monitor 4.0	partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure
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				<ul style="list-style-type: none"> - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1

2010/08 - 2013/01	CFGB	2.0	170	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded
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loaded

- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure

				<ul style="list-style-type: none"> - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30

2011/05
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CFFE

2.0

116

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle,

					<p>partially loaded</p> <ul style="list-style-type: none"> - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings

- Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - CAN communication
 - Supply voltage term.30
 - Tire pressure monitoring status
 - Transportation mode
 - System status
 - Inflation pressure sensor 1 Temperature
 - Inflation pressure sensor 2 Temperature
 - Inflation pressure sensor 3 Temperature
 - Inflation pressure sensor 4 Temperature
 - Inflation pressure sensor 1 Sensor code
 - Inflation pressure sensor 2 Sensor code
 - Inflation pressure sensor 3 Sensor code
 - Inflation pressure sensor 4 Sensor code
 - Radio interference
 - Load status selected
 - Warning: Check front left tire pressure
 - Warning: Check front right tire pressure
 - Tire pressure sensor 1: Actual pressure
 - Tire pressure sensor 1: Specified pressure
 - Tire pressure sensor 1: Wheel position
 - Tire pressure sensor 2: Actual pressure
 - Tire pressure sensor 2: Specified pressure
 - Tire pressure sensor 2: Wheel position
 - Tire pressure sensor 3: Actual pressure
 - Tire pressure sensor 3: Specified pressure
 - Tire pressure sensor 3: Wheel position
 - Designation wheel set 1
 - Designation wheel set 2
 - Designation wheel set 3
 - Designation wheel set 4
 - Designation wheel set 5
 - Designation wheel set 6
 - Designation wheel set 7
 - Designation wheel set 8
 - Designation wheel set 9
 - Designation wheel set 10
 - Currently monitored wheel set
 - Designation of currently monitored wheel set
 - Warning: Front left tire flat
 - Warning: Front right tire flat
 - Warning: Rear left tire flat
 - Warning: Rear right tire flat
 - Designation wheel set 11
 - Vehicle speed CAN message
 - CAN message voltage terminal 30
 - Tire pressure sensor: Last actual temperature received
 - Tire pressure sensor: Last actual pressure received
 - Tire pressure monitor sensor: Last wheel position received
 - Tire pressure monitor sensor: Last sensor code received
 - Tire pressure sensor 4: Actual pressure
 - Tire pressure sensor 4: Specified pressure
 - Tire pressure sensor 4: Wheel position
 - Wheel set 1 specified pressure, front axle, partially loaded
 - Wheel set 1 specified pressure, front axle, fully loaded
 - Wheel set 1 specified pressure, rear axle, partially loaded
 - Wheel set 1 specified pressure, rear axle, fully loaded

2013/01	CFGC	2.0	177	Tire control system Tire pressure monitor 4.0	<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded
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					<p>loaded</p> <ul style="list-style-type: none"> - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW					Sharan [7N1] - Sharan 2.0 TDI 4Motion	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature 	

- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded

2010/05 - 2012/05	CFFA	2.0	136	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded - Wheel set 7 specified pressure, front axle, fully loaded - Wheel set 7 specified pressure, rear axle, partially loaded - Wheel set 7 specified pressure, rear axle, fully loaded - Wheel set 8 specified pressure, front axle, partially loaded - Wheel set 8 specified pressure, front axle, fully loaded - Wheel set 8 specified pressure, rear axle, partially loaded - Wheel set 8 specified pressure, rear axle, fully loaded - Wheel set 9 specified pressure, front axle, partially loaded - Wheel set 9 specified pressure, front axle, fully loaded - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded
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				<ul style="list-style-type: none"> - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position

2011/05 -	CFFB	2.0	140	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded
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- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure

					<ul style="list-style-type: none"> - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
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VW					
Sharan [7N1] - Sharan 2.0 TSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set

2010/11 -	CCZA	2.0	200	Tire control system Tire pressure monitor 4.0	<ul style="list-style-type: none"> - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received - Tire pressure monitor sensor: Last sensor code received - Tire pressure sensor 4: Actual pressure - Tire pressure sensor 4: Specified pressure - Tire pressure sensor 4: Wheel position - Wheel set 1 specified pressure, front axle, partially loaded - Wheel set 1 specified pressure, front axle, fully loaded - Wheel set 1 specified pressure, rear axle, partially loaded - Wheel set 1 specified pressure, rear axle, fully loaded - Wheel set 2 specified pressure, front axle, partially loaded - Wheel set 2 specified pressure, front axle, fully loaded - Wheel set 2 specified pressure, rear axle, partially loaded - Wheel set 2 specified pressure, rear axle, fully loaded - Wheel set 3 specified pressure, front axle, partially loaded - Wheel set 3 specified pressure, front axle, fully loaded - Wheel set 3 specified pressure, rear axle, partially loaded - Wheel set 3 specified pressure, rear axle, fully loaded - Wheel set 4 specified pressure, front axle, partially loaded - Wheel set 4 specified pressure, front axle, fully loaded - Wheel set 4 specified pressure, rear axle, partially loaded - Wheel set 4 specified pressure, rear axle, fully loaded - Wheel set 5 specified pressure, front axle, partially loaded - Wheel set 5 specified pressure, front axle, fully loaded - Wheel set 5 specified pressure, rear axle, partially loaded - Wheel set 5 specified pressure, rear axle, fully loaded - Wheel set 6 specified pressure, front axle, partially loaded - Wheel set 6 specified pressure, front axle, fully loaded - Wheel set 6 specified pressure, rear axle, partially loaded - Wheel set 6 specified pressure, rear axle, fully loaded - Wheel set 7 specified pressure, front axle, partially loaded
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- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature

- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

VW					Touareg [7P5] - Touareg 3.0 FSI Hybrid	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message - CAN message voltage terminal 30 - Tire pressure sensor: Last actual temperature received - Tire pressure sensor: Last actual pressure received - Tire pressure monitor sensor: Last wheel position received 	

Tire control system
Tire pressure monitor 4.0

- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded

loaded

- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Transfer configuration
 - ACC sensor adjustment
 - Basic adjustment
- **Error memory**
- **Current values**
 - Calculated vehicle speed

2010/03 -	CGEA	3.0	333	<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> - Power supply Clamp 15 - Software version - Vertical angle deviation - Horizontal angle deviation - Radar beam 1 intensity - Radar beam 2 intensity - Radar beam 3 intensity - Radar beam 4 intensity - Radar status - Misalignment angle - ACC lens heating actuation signal - Radar beam 1 and 2 medium intensity - Misalignment angle 2 - Control unit temperature - System identification - Calculated vehicle acceleration • Actuators <ul style="list-style-type: none"> - Lens heating actuation - ACC lens adjustment
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - Adjustment of vehicle level sensors - Activate air suspension - Adaptation of normal level - Wheel alignment - Activate/deactivate shipment mode • Special functions <ul style="list-style-type: none"> - Pressure reduction - Pressure accumulator, preload pressure - Pressure build-up - Charge air suspension struts • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Engine revolution - stop lights switch - air tank pressure - switching valve 1 - switching valve 2 - Standard level adjustment - All doors status - Ventilation solenoid valve - Central locking status - Installing position sensor front left - Installing position sensor front right - Installing position sensor rear left - Installing position sensor rear right - Longitudinal acceleration - System pressure - Power supply Clamp 15 - Hatchback status - Ambient temperature - Brake pressure - Basic setting status - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve spec.current - Transportation mode - System status - System status - Power supply Clamp 30

- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right

- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration

					<ul style="list-style-type: none"> - Transverse tilt - Dry-running operation function - Front right normal level deviation - Front left normal level deviation - Norm.level deviation, rear left - Norm.level deviation, rear right - Calculated compressor temperature - Compressor temperature - Compressor relay - Air release valve - Pressure accumulator valve - Level valve front left - Level valve front right - Level valve rear left - Level valve rear right - Metered air quantity - Air suspension compressor - Level control status - Shipment mode - Current drive program • Actuators <ul style="list-style-type: none"> - Button lights - Central pressure accum., pressure discharge - Centr. pressure accum., charging - Air suspension compressor relay - Front left air spring valve - Front right air spring valve - Rear left air spring valve - Rear right air spring valve - Damper adjustment valve current - Front left damper adjustment valve current, Soft - Front left damper adjustment valve current, Hard - Front right damper adjustment valve current, Soft - Front right damper adjustment valve current, Hard - Rear left damper adjustment valve current, Soft - Rear left damper adjustment valve current, Hard - Rear right damper adjustment valve current, Soft - Rear right damper adjustment valve current, Hard
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VW					Touareg [7P5] - Touareg 3.0 TDI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code 	

- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded

Tire control system
Tire pressure monitor 4.0

loaded

- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low

				<ul style="list-style-type: none"> - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication 	
			<p>Cruise control ACC 4.1</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - ACC sensor adjustment - Basic adjustment • Error memory • Current values <ul style="list-style-type: none"> - Calculated vehicle speed - Power supply Clamp 15 - Software version - Vertical angle deviation - Horizontal angle deviation - Radar beam 1 intensity - Radar beam 2 intensity - Radar beam 3 intensity - Radar beam 4 intensity - Radar status - Misalignment angle - ACC lens heating actuation signal - Radar beam 1 and 2 medium intensity - Misalignment angle 2 - Control unit temperature - System identification - Calculated vehicle acceleration • Actuators <ul style="list-style-type: none"> - Lens heating actuation - ACC lens adjustment
<p>2010/01 - 2011/05</p>	<p>CASA</p>	<p>3.0</p>	<p>239</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - Adjustment of vehicle level sensors - Activate air suspension - Adaptation of normal level - Wheel alignment

- Activate/deactivate shipment mode

• **Special functions**

- Pressure reduction
- Pressure accumulator, preload pressure
- Pressure build-up
- Charge air suspension struts

• **Error memory**

• **Current values**

- Vehicle driving speed
- Engine revolution
- stop lights switch
- air tank pressure
- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value

Underbody/Steering
Adaptive suspension system 4.0

- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations

- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
 - Button lights
 - Central pressure accum., pressure discharge
 - Centr. pressure accum., charging
 - Air suspension compressor relay
 - Front left air spring valve
 - Front right air spring valve
 - Rear left air spring valve

				<ul style="list-style-type: none"> - Rear right air spring valve - Damper adjustment valve current - Front left damper adjustment valve current, Soft - Front left damper adjustment valve current, Hard - Front right damper adjustment valve current, Soft - Front right damper adjustment valve current, Hard - Rear left damper adjustment valve current, Soft - Rear left damper adjustment valve current, Hard - Rear right damper adjustment valve current, Soft - Rear right damper adjustment valve current, Hard
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10 - Currently monitored wheel set - Designation of currently monitored wheel set - Warning: Front left tire flat - Warning: Front right tire flat - Warning: Rear left tire flat - Warning: Rear right tire flat - Designation wheel set 11 - Vehicle speed CAN message

Tire control system
Tire pressure monitor 4.0

- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded

- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure
- Front left tire pressure sensor temperature
- Front right tire pressure sensor temperature
- Rear left tire pressure sensor temperature
- Rear right tire pressure sensor temperature
- Tire puncture indication

- Identification
- Clear errors

				<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - ACC sensor adjustment - Basic adjustment • Error memory • Current values <ul style="list-style-type: none"> - Calculated vehicle speed - Power supply Clamp 15 - Software version - Vertical angle deviation - Horizontal angle deviation - Radar beam 1 intensity - Radar beam 2 intensity - Radar beam 3 intensity - Radar beam 4 intensity - Radar status - Misalignment angle - ACC lens heating actuation signal - Radar beam 1 and 2 medium intensity - Misalignment angle 2 - Control unit temperature - System identification - Calculated vehicle acceleration • Actuators <ul style="list-style-type: none"> - Lens heating actuation - ACC lens adjustment
<p>2010/11 - 2011/05</p>	<p>CASD</p>	<p>3.0</p>	<p>204</p>		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - Adjustment of vehicle level sensors - Activate air suspension - Adaptation of normal level - Wheel alignment - Activate/deactivate shipment mode • Special functions <ul style="list-style-type: none"> - Pressure reduction - Pressure accumulator, preload pressure - Pressure build-up - Charge air suspension struts • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Engine revolution - stop lights switch - air tank pressure - switching valve 1 - switching valve 2 - Standard level adjustment - All doors status - Ventilation solenoid valve - Central locking status - Installing position sensor front left - Installing position sensor front right - Installing position sensor rear left - Installing position sensor rear right - Longitudinal acceleration - System pressure - Power supply Clamp 15 - Hatchback status - Ambient temperature - Brake pressure - Basic setting status - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current

- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation

Underbody/Steering
Adaptive suspension system 4.0

- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative

				<ul style="list-style-type: none"> - Act. MMI setting Jack mode - Act. MMI setting Suspension raising - Act. MMI setting Trailer mode - Specified normal level status - Front left body acceleration - Front right body acceleration - Rear body acceleration - Transverse tilt - Dry-running operation function - Front right normal level deviation - Front left normal level deviation - Norm.level deviation, rear left - Norm.level deviation, rear right - Calculated compressor temperature - Compressor temperature - Compressor relay - Air release valve - Pressure accumulator valve - Level valve front left - Level valve front right - Level valve rear left - Level valve rear right - Metered air quantity - Air suspension compressor - Level control status - Shipment mode - Current drive program • Actuators - Button lights - Central pressure accum., pressure discharge - Centr. pressure accum., charging - Air suspension compressor relay - Front left air spring valve - Front right air spring valve - Rear left air spring valve - Rear right air spring valve - Damper adjustment valve current - Front left damper adjustment valve current, Soft - Front left damper adjustment valve current, Hard - Front right damper adjustment valve current, Soft - Front right damper adjustment valve current, Hard - Rear left damper adjustment valve current, Soft - Rear left damper adjustment valve current, Hard - Rear right damper adjustment valve current, Soft - Rear right damper adjustment valve current, Hard
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature

- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded

Tire control system
Tire pressure monitor 4.0

- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded

				<ul style="list-style-type: none"> - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
		Cruise control ACC 4.1		<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - ACC sensor adjustment - Basic adjustment • Error memory • Current values <ul style="list-style-type: none"> - Calculated vehicle speed - Power supply Clamp 15 - Software version - Vertical angle deviation - Horizontal angle deviation - Radar beam 1 intensity - Radar beam 2 intensity - Radar beam 3 intensity - Radar beam 4 intensity - Radar status - Misalignment angle - ACC lens heating actuation signal - Radar beam 1 and 2 medium intensity - Misalignment angle 2 - Control unit temperature - System identification - Calculated vehicle acceleration • Actuators <ul style="list-style-type: none"> - Lens heating actuation - ACC lens adjustment
				<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - Adjustment of vehicle level sensors - Activate air suspension

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- Adaptation of normal level
- Wheel alignment
- Activate/deactivate shipment mode
- **Special functions**
 - Pressure reduction
 - Pressure accumulator, preload pressure
 - Pressure build-up
 - Charge air suspension struts
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - Engine revolution
 - stop lights switch
 - air tank pressure
 - switching valve 1
 - switching valve 2
 - Standard level adjustment
 - All doors status
 - Ventilation solenoid valve
 - Central locking status
 - Installing position sensor front left
 - Installing position sensor front right
 - Installing position sensor rear left
 - Installing position sensor rear right
 - Longitudinal acceleration
 - System pressure
 - Power supply Clamp 15
 - Hatchback status
 - Ambient temperature
 - Brake pressure
 - Basic setting status
 - Carriage acceleration sensor front left
 - Carriage acceleration sensor front right
 - Carriage acceleration sensor rear
 - Front left damper valve act. current
 - Front right damper valve act.current
 - Rear left damper valve act. current
 - Rear right damper valve spec.current
 - Transportation mode
 - System status
 - System status
 - Power supply Clamp 30
 - Diagnosis mode
 - Terminal 50 status
 - Audi Drive Select
 - Front left wheel housing edge body height
 - Front right wheel housing edge body height
 - Rear left wheel housing edge body height
 - Rear right wheel housing edge body height
 - Time stamp
 - Complete altitude calibration
 - Front left vehicle level sensor, PWM signal value
 - Front right vehicle level sensor, PWM signal value
 - Rear left vehicle level sensor, PWM signal value
 - Rear right vehicle level sensor, PWM signal value
 - Compressor ambient temperature
 - Extreme level detected
 - System pressure sensor power supply
 - Left vehicle level sensor power supply
 - Right vehicle level sensor power supply
 - Solenoid valve block power supply
 - Front left damper valve current
 - Front right damper valve current
 - Rear left damper valve current
 - Rear right damper valve current
 - Front left damper PWM signal value

Underbody/Steering
Adaptive suspension system 4.0

- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control

- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program
- **Actuators**
 - Button lights
 - Central pressure accum., pressure discharge
 - Centr. pressure accum., charging
 - Air suspension compressor relay
 - Front left air spring valve

					<ul style="list-style-type: none"> - Front right air spring valve - Rear left air spring valve - Rear right air spring valve - Damper adjustment valve current - Front left damper adjustment valve current, Soft - Front left damper adjustment valve current, Hard - Front right damper adjustment valve current, Soft - Front right damper adjustment valve current, Hard - Rear left damper adjustment valve current, Soft - Rear left damper adjustment valve current, Hard - Rear right damper adjustment valve current, Soft - Rear right damper adjustment valve current, Hard
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VW Touareg [7P5] - Touareg 4.2 TDI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position - Tire pressure sensor 3: Actual pressure - Tire pressure sensor 3: Specified pressure - Tire pressure sensor 3: Wheel position - Designation wheel set 1 - Designation wheel set 2 - Designation wheel set 3 - Designation wheel set 4 - Designation wheel set 5 - Designation wheel set 6 - Designation wheel set 7 - Designation wheel set 8 - Designation wheel set 9 - Designation wheel set 10

Tire control system
Tire pressure monitor 4.0

- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded

- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position
- ALL button
- Front left tire pressure sensor actual pressure
- Front right tire pressure sensor actual pressure
- Rear left tire pressure sensor actual pressure
- Rear right tire pressure sensor actual pressure
- Front left tire pressure sensor specified pressure
- Front right tire pressure sensor specified pressure
- Rear left tire pressure sensor specified pressure
- Rear right tire pressure sensor specified pressure

				<ul style="list-style-type: none"> - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			Cruise control ACC 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - ACC sensor adjustment - Basic adjustment • Error memory • Current values <ul style="list-style-type: none"> - Calculated vehicle speed - Power supply Clamp 15 - Software version - Vertical angle deviation - Horizontal angle deviation - Radar beam 1 intensity - Radar beam 2 intensity - Radar beam 3 intensity - Radar beam 4 intensity - Radar status - Misalignment angle - ACC lens heating actuation signal - Radar beam 1 and 2 medium intensity - Misalignment angle 2 - Control unit temperature - System identification - Calculated vehicle acceleration • Actuators <ul style="list-style-type: none"> - Lens heating actuation - ACC lens adjustment
2010/01 -	CKDA	4.2	340	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - Adjustment of vehicle level sensors - Activate air suspension - Adaptation of normal level - Wheel alignment - Activate/deactivate shipment mode • Special functions <ul style="list-style-type: none"> - Pressure reduction - Pressure accumulator, preload pressure - Pressure build-up - Charge air suspension struts • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Engine revolution - stop lights switch - air tank pressure - switching valve 1 - switching valve 2 - Standard level adjustment - All doors status - Ventilation solenoid valve - Central locking status - Installing position sensor front left - Installing position sensor front right - Installing position sensor rear left - Installing position sensor rear right - Longitudinal acceleration - System pressure - Power supply Clamp 15

- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level

Underbody/Steering
Adaptive suspension system 4.0

- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation

					<p>operations</p> <ul style="list-style-type: none"> - No.of rear right additional volume valve actuation <p>operations</p> <ul style="list-style-type: none"> - Level control active controller - Level control, control requirement - Current lane recognition mode - Steering angle sensor: Direction <p>positive/negative</p> <ul style="list-style-type: none"> - Act. MMI setting Jack mode - Act. MMI setting Suspension raising - Act. MMI setting Trailer mode - Specified normal level status - Front left body acceleration - Front right body acceleration - Rear body acceleration - Transverse tilt - Dry-running operation function - Front right normal level deviation - Front left normal level deviation - Norm.level deviation, rear left - Norm.level deviation, rear right - Calculated compressor temperature - Compressor temperature - Compressor relay - Air release valve - Pressure accumulator valve - Level valve front left - Level valve front right - Level valve rear left - Level valve rear right - Metered air quantity - Air suspension compressor - Level control status - Shipment mode - Current drive program <p>• Actuators</p> <ul style="list-style-type: none"> - Button lights - Central pressure accum., pressure discharge - Centr. pressure accum., charging - Air suspension compressor relay - Front left air spring valve - Front right air spring valve - Rear left air spring valve - Rear right air spring valve - Damper adjustment valve current - Front left damper adjustment valve current, Soft - Front left damper adjustment valve current, Hard - Front right damper adjustment valve current, Soft - Front right damper adjustment valve current, Hard - Rear left damper adjustment valve current, Soft - Rear left damper adjustment valve current, Hard - Rear right damper adjustment valve current, Soft - Rear right damper adjustment valve current, Hard
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VW					Touareg [7P5] - Touareg 4.2 FSI	
Year	Engine	Liters	HP	System	Functions	
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings - Tire pressure monitor individual specified 	

pressure adjustment

- **Error memory**

- **Current values**

- Vehicle driving speed
- CAN communication
- Supply voltage term.30
- Tire pressure monitoring status
- Transportation mode
- System status
- Inflation pressure sensor 1 Temperature
- Inflation pressure sensor 2 Temperature
- Inflation pressure sensor 3 Temperature
- Inflation pressure sensor 4 Temperature
- Inflation pressure sensor 1 Sensor code
- Inflation pressure sensor 2 Sensor code
- Inflation pressure sensor 3 Sensor code
- Inflation pressure sensor 4 Sensor code
- Radio interference
- Load status selected
- Warning: Check front left tire pressure
- Warning: Check front right tire pressure
- Tire pressure sensor 1: Actual pressure
- Tire pressure sensor 1: Specified pressure
- Tire pressure sensor 1: Wheel position
- Tire pressure sensor 2: Actual pressure
- Tire pressure sensor 2: Specified pressure
- Tire pressure sensor 2: Wheel position
- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded

Tire control system
Tire pressure monitor 4.0

- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded

	<ul style="list-style-type: none"> - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
<p>Cruise control ACC 4.1</p>	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - ACC sensor adjustment - Basic adjustment • Error memory • Current values <ul style="list-style-type: none"> - Calculated vehicle speed - Power supply Clamp 15 - Software version - Vertical angle deviation - Horizontal angle deviation - Radar beam 1 intensity - Radar beam 2 intensity - Radar beam 3 intensity - Radar beam 4 intensity - Radar status - Misalignment angle - ACC lens heating actuation signal - Radar beam 1 and 2 medium intensity - Misalignment angle 2

2011/01 -	CGNA	4.2	360	<ul style="list-style-type: none"> - Control unit temperature - System identification - Calculated vehicle acceleration • Actuators <ul style="list-style-type: none"> - Lens heating actuation - ACC lens adjustment <hr/> <ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - Adjustment of vehicle level sensors - Activate air suspension - Adaptation of normal level - Wheel alignment - Activate/deactivate shipment mode • Special functions <ul style="list-style-type: none"> - Pressure reduction - Pressure accumulator, preload pressure - Pressure build-up - Charge air suspension struts • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Engine revolution - stop lights switch - air tank pressure - switching valve 1 - switching valve 2 - Standard level adjustment - All doors status - Ventilation solenoid valve - Central locking status - Installing position sensor front left - Installing position sensor front right - Installing position sensor rear left - Installing position sensor rear right - Longitudinal acceleration - System pressure - Power supply Clamp 15 - Hatchback status - Ambient temperature - Brake pressure - Basic setting status - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve spec.current - Transportation mode - System status - System status - Power supply Clamp 30 - Diagnosis mode - Terminal 50 status - Audi Drive Select - Front left wheel housing edge body height - Front right wheel housing edge body height - Rear left wheel housing edge body height - Rear right wheel housing edge body height - Time stamp - Complete altitude calibration - Front left vehicle level sensor, PWM signal value - Front right vehicle level sensor, PWM signal value <p>value</p>
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Underbody/Steering
Adaptive suspension system 4.0

- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour

- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No. of front left additional volume valve actuation operations
- No. of front right additional volume valve actuation operations
- No. of rear left additional volume valve actuation operations
- No. of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left

					<ul style="list-style-type: none"> - Level valve front right - Level valve rear left - Level valve rear right - Metered air quantity - Air suspension compressor - Level control status - Shipment mode - Current drive program • Actuators <ul style="list-style-type: none"> - Button lights - Central pressure accum., pressure discharge - Centr. pressure accum., charging - Air suspension compressor relay - Front left air spring valve - Front right air spring valve - Rear left air spring valve - Rear right air spring valve - Damper adjustment valve current - Front left damper adjustment valve current, Soft - Front left damper adjustment valve current, Hard - Front right damper adjustment valve current, Soft - Front right damper adjustment valve current, Hard - Rear left damper adjustment valve current, Soft - Rear left damper adjustment valve current, Hard - Rear right damper adjustment valve current, Soft - Rear right damper adjustment valve current, Hard
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VW					
Touareg [7P5] - Touareg 3.6 FSI					
Year	Engine	Liters	HP	System	Functions
					<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Tire pressure monitor individual specified pressure adjustment • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - CAN communication - Supply voltage term.30 - Tire pressure monitoring status - Transportation mode - System status - Inflation pressure sensor 1 Temperature - Inflation pressure sensor 2 Temperature - Inflation pressure sensor 3 Temperature - Inflation pressure sensor 4 Temperature - Inflation pressure sensor 1 Sensor code - Inflation pressure sensor 2 Sensor code - Inflation pressure sensor 3 Sensor code - Inflation pressure sensor 4 Sensor code - Radio interference - Load status selected - Warning: Check front left tire pressure - Warning: Check front right tire pressure - Tire pressure sensor 1: Actual pressure - Tire pressure sensor 1: Specified pressure - Tire pressure sensor 1: Wheel position - Tire pressure sensor 2: Actual pressure - Tire pressure sensor 2: Specified pressure - Tire pressure sensor 2: Wheel position

Tire control system
Tire pressure monitor 4.0

- Tire pressure sensor 3: Actual pressure
- Tire pressure sensor 3: Specified pressure
- Tire pressure sensor 3: Wheel position
- Designation wheel set 1
- Designation wheel set 2
- Designation wheel set 3
- Designation wheel set 4
- Designation wheel set 5
- Designation wheel set 6
- Designation wheel set 7
- Designation wheel set 8
- Designation wheel set 9
- Designation wheel set 10
- Currently monitored wheel set
- Designation of currently monitored wheel set
- Warning: Front left tire flat
- Warning: Front right tire flat
- Warning: Rear left tire flat
- Warning: Rear right tire flat
- Designation wheel set 11
- Vehicle speed CAN message
- CAN message voltage terminal 30
- Tire pressure sensor: Last actual temperature received
- Tire pressure sensor: Last actual pressure received
- Tire pressure monitor sensor: Last wheel position received
- Tire pressure monitor sensor: Last sensor code received
- Tire pressure sensor 4: Actual pressure
- Tire pressure sensor 4: Specified pressure
- Tire pressure sensor 4: Wheel position
- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded

loaded

- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded
- Wheel set 9 specified pressure, rear axle, partially loaded
- Wheel set 9 specified pressure, rear axle, fully loaded
- Wheel set 10 specified pressure, front axle, partially loaded
- Wheel set 10 specified pressure, front axle, fully loaded
- Wheel set 10 specified pressure, rear axle, partially loaded
- Wheel set 10 specified pressure, rear axle, fully loaded
- Wheel set 11 specified pressure, front axle, partially loaded
- Wheel set 11 specified pressure, front axle, fully loaded
- Wheel set 11 specified pressure, rear axle, partially loaded
- Wheel set 11 specified pressure, rear axle, fully loaded
- Warning: Check rear left tire pressure
- Warning: Check rear right tire pressure
- Warning: Front left tire pressure too low
- Warning: Front right tire pressure too low
- Warning: Rear left tire pressure too low
- Warning: Rear right tire pressure too low
- Specified pressure rear axle, currently monitored wheel set
- Specified pressure front axle, currently monitored wheel set
- Tire pressure display
- Tire pressure monitoring display
- Terminal 30B status
- MODE button status
- Stratification flap specified position

				<ul style="list-style-type: none"> - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
			Cruise control ACC 4.1	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - ACC sensor adjustment - Basic adjustment • Error memory • Current values <ul style="list-style-type: none"> - Calculated vehicle speed - Power supply Clamp 15 - Software version - Vertical angle deviation - Horizontal angle deviation - Radar beam 1 intensity - Radar beam 2 intensity - Radar beam 3 intensity - Radar beam 4 intensity - Radar status - Misalignment angle - ACC lens heating actuation signal - Radar beam 1 and 2 medium intensity - Misalignment angle 2 - Control unit temperature - System identification - Calculated vehicle acceleration • Actuators <ul style="list-style-type: none"> - Lens heating actuation - ACC lens adjustment
2010/04 -	CGRA	3.6	280	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - Adjustment of vehicle level sensors - Activate air suspension - Adaptation of normal level - Wheel alignment - Activate/deactivate shipment mode • Special functions <ul style="list-style-type: none"> - Pressure reduction - Pressure accumulator, preload pressure - Pressure build-up - Charge air suspension struts • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Engine revolution - stop lights switch - air tank pressure

- switching valve 1
- switching valve 2
- Standard level adjustment
- All doors status
- Ventilation solenoid valve
- Central locking status
- Installing position sensor front left
- Installing position sensor front right
- Installing position sensor rear left
- Installing position sensor rear right
- Longitudinal acceleration
- System pressure
- Power supply Clamp 15
- Hatchback status
- Ambient temperature
- Brake pressure
- Basic setting status
- Carriage acceleration sensor front left
- Carriage acceleration sensor front right
- Carriage acceleration sensor rear
- Front left damper valve act. current
- Front right damper valve act.current
- Rear left damper valve act. current
- Rear right damper valve spec.current
- Transportation mode
- System status
- System status
- Power supply Clamp 30
- Diagnosis mode
- Terminal 50 status
- Audi Drive Select
- Front left wheel housing edge body height
- Front right wheel housing edge body height
- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal

Underbody/Steering
Adaptive suspension system 4.0

- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle
- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations

actuation operations

- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left
- Norm.level deviation, rear right
- Calculated compressor temperature
- Compressor temperature
- Compressor relay
- Air release valve
- Pressure accumulator valve
- Level valve front left
- Level valve front right
- Level valve rear left
- Level valve rear right
- Metered air quantity
- Air suspension compressor
- Level control status
- Shipment mode
- Current drive program

• **Actuators**

- Button lights
- Central pressure accum., pressure discharge
- Centr. pressure accum., charging
- Air suspension compressor relay
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Damper adjustment valve current
- Front left damper adjustment valve current, Soft
- Front left damper adjustment valve current, Hard
- Front right damper adjustment valve current, Soft
- Front right damper adjustment valve current, Hard
- Rear left damper adjustment valve current, Soft
- Rear left damper adjustment valve current, Hard
- Rear right damper adjustment valve current, Hard

Soft
- Rear right damper adjustment valve current,
Hard

- **Identification**
- **Clear errors**
- **Adjustments / settings**
 - Tire pressure monitor individual specified pressure adjustment
- **Error memory**
- **Current values**
 - Vehicle driving speed
 - CAN communication
 - Supply voltage term.30
 - Tire pressure monitoring status
 - Transportation mode
 - System status
 - Inflation pressure sensor 1 Temperature
 - Inflation pressure sensor 2 Temperature
 - Inflation pressure sensor 3 Temperature
 - Inflation pressure sensor 4 Temperature
 - Inflation pressure sensor 1 Sensor code
 - Inflation pressure sensor 2 Sensor code
 - Inflation pressure sensor 3 Sensor code
 - Inflation pressure sensor 4 Sensor code
 - Radio interference
 - Load status selected
 - Warning: Check front left tire pressure
 - Warning: Check front right tire pressure
 - Tire pressure sensor 1: Actual pressure
 - Tire pressure sensor 1: Specified pressure
 - Tire pressure sensor 1: Wheel position
 - Tire pressure sensor 2: Actual pressure
 - Tire pressure sensor 2: Specified pressure
 - Tire pressure sensor 2: Wheel position
 - Tire pressure sensor 3: Actual pressure
 - Tire pressure sensor 3: Specified pressure
 - Tire pressure sensor 3: Wheel position
 - Designation wheel set 1
 - Designation wheel set 2
 - Designation wheel set 3
 - Designation wheel set 4
 - Designation wheel set 5
 - Designation wheel set 6
 - Designation wheel set 7
 - Designation wheel set 8
 - Designation wheel set 9
 - Designation wheel set 10
 - Currently monitored wheel set
 - Designation of currently monitored wheel set
 - Warning: Front left tire flat
 - Warning: Front right tire flat
 - Warning: Rear left tire flat
 - Warning: Rear right tire flat
 - Designation wheel set 11
 - Vehicle speed CAN message
 - CAN message voltage terminal 30
 - Tire pressure sensor: Last actual temperature received
 - Tire pressure sensor: Last actual pressure received
 - Tire pressure monitor sensor: Last wheel position received
 - Tire pressure monitor sensor: Last sensor code received
 - Tire pressure sensor 4: Actual pressure
 - Tire pressure sensor 4: Specified pressure
 - Tire pressure sensor 4: Wheel position

Tire control system
Tire pressure monitor 4.0

- Wheel set 1 specified pressure, front axle, partially loaded
- Wheel set 1 specified pressure, front axle, fully loaded
- Wheel set 1 specified pressure, rear axle, partially loaded
- Wheel set 1 specified pressure, rear axle, fully loaded
- Wheel set 2 specified pressure, front axle, partially loaded
- Wheel set 2 specified pressure, front axle, fully loaded
- Wheel set 2 specified pressure, rear axle, partially loaded
- Wheel set 2 specified pressure, rear axle, fully loaded
- Wheel set 3 specified pressure, front axle, partially loaded
- Wheel set 3 specified pressure, front axle, fully loaded
- Wheel set 3 specified pressure, rear axle, partially loaded
- Wheel set 3 specified pressure, rear axle, fully loaded
- Wheel set 4 specified pressure, front axle, partially loaded
- Wheel set 4 specified pressure, front axle, fully loaded
- Wheel set 4 specified pressure, rear axle, partially loaded
- Wheel set 4 specified pressure, rear axle, fully loaded
- Wheel set 5 specified pressure, front axle, partially loaded
- Wheel set 5 specified pressure, front axle, fully loaded
- Wheel set 5 specified pressure, rear axle, partially loaded
- Wheel set 5 specified pressure, rear axle, fully loaded
- Wheel set 6 specified pressure, front axle, partially loaded
- Wheel set 6 specified pressure, front axle, fully loaded
- Wheel set 6 specified pressure, rear axle, partially loaded
- Wheel set 6 specified pressure, rear axle, fully loaded
- Wheel set 7 specified pressure, front axle, partially loaded
- Wheel set 7 specified pressure, front axle, fully loaded
- Wheel set 7 specified pressure, rear axle, partially loaded
- Wheel set 7 specified pressure, rear axle, fully loaded
- Wheel set 8 specified pressure, front axle, partially loaded
- Wheel set 8 specified pressure, front axle, fully loaded
- Wheel set 8 specified pressure, rear axle, partially loaded
- Wheel set 8 specified pressure, rear axle, fully loaded
- Wheel set 9 specified pressure, front axle, partially loaded
- Wheel set 9 specified pressure, front axle, fully loaded

	<ul style="list-style-type: none"> - Wheel set 9 specified pressure, rear axle, partially loaded - Wheel set 9 specified pressure, rear axle, fully loaded - Wheel set 10 specified pressure, front axle, partially loaded - Wheel set 10 specified pressure, front axle, fully loaded - Wheel set 10 specified pressure, rear axle, partially loaded - Wheel set 10 specified pressure, rear axle, fully loaded - Wheel set 11 specified pressure, front axle, partially loaded - Wheel set 11 specified pressure, front axle, fully loaded - Wheel set 11 specified pressure, rear axle, partially loaded - Wheel set 11 specified pressure, rear axle, fully loaded - Warning: Check rear left tire pressure - Warning: Check rear right tire pressure - Warning: Front left tire pressure too low - Warning: Front right tire pressure too low - Warning: Rear left tire pressure too low - Warning: Rear right tire pressure too low - Specified pressure rear axle, currently monitored wheel set - Specified pressure front axle, currently monitored wheel set - Tire pressure display - Tire pressure monitoring display - Terminal 30B status - MODE button status - Stratification flap specified position - ALL button - Front left tire pressure sensor actual pressure - Front right tire pressure sensor actual pressure - Rear left tire pressure sensor actual pressure - Rear right tire pressure sensor actual pressure - Front left tire pressure sensor specified pressure - Front right tire pressure sensor specified pressure - Rear left tire pressure sensor specified pressure - Rear right tire pressure sensor specified pressure - Front left tire pressure sensor temperature - Front right tire pressure sensor temperature - Rear left tire pressure sensor temperature - Rear right tire pressure sensor temperature - Tire puncture indication
Cruise control	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - ACC sensor adjustment - Basic adjustment • Error memory • Current values <ul style="list-style-type: none"> - Calculated vehicle speed - Power supply Clamp 15 - Software version - Vertical angle deviation - Horizontal angle deviation - Radar beam 1 intensity

			ACC 4.1	<ul style="list-style-type: none"> - Radar beam 2 intensity - Radar beam 3 intensity - Radar beam 4 intensity - Radar status - Misalignment angle - ACC lens heating actuation signal - Radar beam 1 and 2 medium intensity - Misalignment angle 2 - Control unit temperature - System identification - Calculated vehicle acceleration • Actuators <ul style="list-style-type: none"> - Lens heating actuation - ACC lens adjustment
2010/08	CMTA	3.6	249	<ul style="list-style-type: none"> • Identification • Clear errors • Adjustments / settings <ul style="list-style-type: none"> - Transfer configuration - Adjustment of vehicle level sensors - Activate air suspension - Adaptation of normal level - Wheel alignment - Activate/deactivate shipment mode • Special functions <ul style="list-style-type: none"> - Pressure reduction - Pressure accumulator, preload pressure - Pressure build-up - Charge air suspension struts • Error memory • Current values <ul style="list-style-type: none"> - Vehicle driving speed - Engine revolution - stop lights switch - air tank pressure - switching valve 1 - switching valve 2 - Standard level adjustment - All doors status - Ventilation solenoid valve - Central locking status - Installing position sensor front left - Installing position sensor front right - Installing position sensor rear left - Installing position sensor rear right - Longitudinal acceleration - System pressure - Power supply Clamp 15 - Hatchback status - Ambient temperature - Brake pressure - Basic setting status - Carriage acceleration sensor front left - Carriage acceleration sensor front right - Carriage acceleration sensor rear - Front left damper valve act. current - Front right damper valve act.current - Rear left damper valve act. current - Rear right damper valve spec.current - Transportation mode - System status - System status - Power supply Clamp 30 - Diagnosis mode - Terminal 50 status - Audi Drive Select - Front left wheel housing edge body height - Front right wheel housing edge body height

Underbody/Steering
Adaptive suspension system 4.0

- Rear left wheel housing edge body height
- Rear right wheel housing edge body height
- Time stamp
- Complete altitude calibration
- Front left vehicle level sensor, PWM signal value
- Front right vehicle level sensor, PWM signal value
- Rear left vehicle level sensor, PWM signal value
- Rear right vehicle level sensor, PWM signal value
- Compressor ambient temperature
- Extreme level detected
- System pressure sensor power supply
- Left vehicle level sensor power supply
- Right vehicle level sensor power supply
- Solenoid valve block power supply
- Front left damper valve current
- Front right damper valve current
- Rear left damper valve current
- Rear right damper valve current
- Front left damper PWM signal value
- Front right damper PWM signal value
- Rear left damper PWM signal value
- Rear right damper PWM signal value
- Accumulator control possible
- Last measured value, air suspension, front left
- Last measured value, air suspension, front right
- Last measured value, air suspension, rear left
- Last measured value, air suspension, rear right
- Current mileage
- Front vehicle level set value
- Rear vehicle level set value
- Load level button: Raise
- Load level button: Lower
- Load level button: Redundant signal
- Load level button LED
- Air suspension: Requested level
- Air suspension: Current level
- Requested damper mode
- Front left air spring valve
- Front right air spring valve
- Rear left air spring valve
- Rear right air spring valve
- Actuators power supply
- Front left deviation from learned vehicle level
- Front right deviation from learned vehicle level
- Rear left deviation from learned vehicle level
- Rear right deviation from learned vehicle level
- Front left absolute vehicle height
- Front right absolute vehicle height
- Rear left absolute vehicle height
- Rear right absolute vehicle height
- Front left normal level height deviation
- Front right normal level height deviation
- Rear left normal level height deviation
- Rear right normal level height deviation
- Front left vehicle level sensor: Offset
- Front right vehicle level sensor: Offset
- Rear left vehicle level sensor: Offset
- Rear right vehicle level sensor: Offset
- Power supply vehicle level sensor, front left
- Power supply vehicle level sensor, front right
- Power supply vehicle level sensor, rear right
- End basic setting
- End running gear setting mode
- Number of invalid keys
- Readiness for operation
- Steering wheel angle sensor: Angle

- Air suspension compressor relay
- Unlearning counter
- Vehicle locking with key
- System test result status
- Time stamp: Month
- Time stamp: Day
- Time stamp: Hour
- Time stamp: Minute
- Time stamp: Second
- Time stamp: Year
- Operating time in hours
- Vehicle inclination analysis
- Vehicle axle twist analysis
- Internal damper mode
- Front left level correction value
- Front right level correction value
- Rear left level correction value
- Rear right level correction value
- Jack mode
- Terminal 15 status
- Compressor operating time air, flow control
- Compressor operating time, Level control
- No. of air flow control actuation operations
- Number of level control actuation operations
- Loading status
- Level control emergency operation
- Number of air release valve actuation operations
- Number of compressor actuation operations
- Number of front left air suspension valve actuation operations
- No. of front right air suspension valve actuation operations
- Number of rear left air suspension valve actuation operations
- Number of rear right air suspension valve actuation operations
- Number of switching valve 1 actuation operations
- Number of switching valve 2 actuation operations
- System temperature 1
- System temperature 2
- Vehicle identification number (VIN) monitoring
- No.of front left additional volume valve actuation operations
- No.of front right additional volume valve actuation operations
- No.of rear left additional volume valve actuation operations
- No.of rear right additional volume valve actuation operations
- Level control active controller
- Level control, control requirement
- Current lane recognition mode
- Steering angle sensor: Direction positive/negative
- Act. MMI setting Jack mode
- Act. MMI setting Suspension raising
- Act. MMI setting Trailer mode
- Specified normal level status
- Front left body acceleration
- Front right body acceleration
- Rear body acceleration
- Transverse tilt
- Dry-running operation function
- Front right normal level deviation
- Front left normal level deviation
- Norm.level deviation, rear left

					<ul style="list-style-type: none"> - Norm.level deviation, rear right - Calculated compressor temperature - Compressor temperature - Compressor relay - Air release valve - Pressure accumulator valve - Level valve front left - Level valve front right - Level valve rear left - Level valve rear right - Metered air quantity - Air suspension compressor - Level control status - Shipment mode - Current drive program • Actuators <ul style="list-style-type: none"> - Button lights - Central pressure accum., pressure discharge - Centr. pressure accum., charging - Air suspension compressor relay - Front left air spring valve - Front right air spring valve - Rear left air spring valve - Rear right air spring valve - Damper adjustment valve current - Front left damper adjustment valve current, Soft - Front left damper adjustment valve current, Hard - Front right damper adjustment valve current, Soft - Front right damper adjustment valve current, Hard - Rear left damper adjustment valve current, Soft - Rear left damper adjustment valve current, Hard - Rear right damper adjustment valve current, Soft - Rear right damper adjustment valve current, Hard
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