

OBD2 OWNER'S MANUAL

FASTER &
EASIER

FOR 1996
AND
NEWER
OBD II
VEHICLES



DIGITAL
AUTO SCANNER

T45
DIGITAL
OBD2/CAN
CODE READER



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1. Safety Precautions and Warnings

To prevent personal injury or damage to vehicles and/or the code reader, read this instruction manual first and observe the following safety precautions at a minimum whenever working on a vehicle:

1. Always perform automotive testing in a safe environment.
2. Wear safety eye protection that meets ANSI standards.
3. Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
4. Operate the vehicle in a well-ventilated work area; Exhaust gases are poisonous.
5. Put blocks on drive wheels and never leave vehicle unattended while running tests.
6. Use extreme caution when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.
7. Put transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking break is engaged.
8. Keep a fire extinguisher suitable for gasoline/Chemical/electrical fires nearby.
9. Don't connect or disconnect any test equipment with ignition on or engine running.
10. Keep the code reader dry, clean and free from oil, water and grease. Use a mild detergent on a clean cloth to clean the outside of the code reader, when necessary.



2. Product Information

2.1 About the Code Reader



1. **LCD DISPLAY**- Indicates test results. It is a backlit 2-line display with 8 characters on each line.
2. **ENTER BUTTON**- Retrieves and Erases Diagnostic Trouble Codes(DTCs) from the vehicles's memory.
3. **SCROLL BUTTON**- Returns menu and Scrolls through Diagnostic Trouble Codes(DTCs) stored in the vehicles's systems.
4. **OBD II CONNECTOR**- Connects the Code Reader to the vehicle's Data Link Connector (DLC).

2.2 Product Features and Benefits

Works with Volkswagen and Audi (Audi/Seat/Skoda/Jetta/Golf/Beetle/Touareg/GTI/Passat and more) sold worldwide of 1990 or newer models.

Reads and erases Diagnostic Trouble Codes (DTCs) of Engine, ABS,



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Airbags and Automatic Transmission.

Turns off check engine light (MIL).

Highly reliable and accurate .

Easy-to-read crystal-clear backlit 2-line LCD display.

Easy to use with one plug-in.

Stand-alone unit with no need for an additional laptop computer to operate.

Small in size and conveniently fits in your palm.

Specially designed for DIYers and car-owners.

Safely communicates with the on-board computers.

No batteries needed-powered via OBD II cable.

One-year warranty.

2.3 Vehicle Coverage

The T45 VW/AUDI Code Reader is specially designed to work with most Volkswagen and Audis sold Worldwide of 1990 or newer models. If a VW/AUDI has a 16-pin "OBD-II style" Data Link Connector(DTC), the code reader will certainly work. If it has an old-style 2x2 Data Link Connector(DTC), then it depends on whether there are 4 or 3 wires connecting to the pins. If there are 4 wires, each connecting a pin, then it will work. If there are only 3 wires, leaving one pin disconnected, then it will not work .

For VW/AUDIs with old-style 2x2 Data Link Connector(DTC), you need to have a 2x2 cabling adapter which is not included in this product package.

3. Operating Instructions

CAUTION: Don't connect or disconnect any test equipment with ignition on or engine running.

1. Turn the ignition off if it is on.
2. Locate the 16-pin Data Link Connector (DLC), and plug into the Code Reader cable connector.
3. Wait for the LCD display to read "VW CAN T45".

**VW AUDI
T45**



4. Turn the ignition on. But do not start the engine.
5. When the display indicates **"1.ENGINE"**, press and release the **ENTER** button. An **"READ?"** message is observed on the display. Then press and release the **ENTER** button again, another **"SCAN..."** message is observed on the display. If you press **SCROLL** button, the **"1.ENGINE"** message is observed on the display.

MENUE: --->
1.ENGINE

READ ?
YES NO

SCAN
< ■■■ >

If an **"ERROR!"** message shows up, turn the ignition off for about 10 seconds, check if the code reader's OBDII connector is securely connected to the vehicle's DLC, and then turn the ignition back to on. Repeat the procedure from step 5. If the **"ERROR"** message does not go away, then there may be problems for the code reader to communicate with the vehicle.

**LINKING
ERROR!**

If you wish to skip the Engine system, just press and release the **SCROLL** button. When the display indicates **"2.A/T"**, you may choose to read this system by pressing and releasing the **ENTER** button or skip to the next systems: **SRS** or **ABS(Airbag System)** by choosing the **SCROLL** button.

6. Read the Diagnostic Trouble Codes on the LCD display.

If there are no Diagnostic Trouble Codes present, the display will read **"NO CODES"**.

NO CODES

If more than one Diagnostic Trouble Code is present, the first code number will display on the first line of the LCD display, the numerical sequence of the code and the total number of the codes present in the system will appear on the second line. To view additional codes, press and release the **"ENTER"** button to scroll, as necessary, until all the codes have been shown up.



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DTC:08

To view previous codes, press and release the "**ENTER**" button to scroll through to the end, and then scroll starting from the first of the list.

00260

01/08

7. Look up part 4 for Diagnostic Trouble Code Definitions. Match the retrieved DTC(S) with those listed and read the definitions.

8. If you wish to erase the DTC(s) or exit to the next system, then press and release the "**ENTER**" button. The LCD display will read "**ERASE?**" for your selection.

ERASE?
YES NO

CAUTION: Erasing the Diagnostic Trouble Codes allows the Code Reader to delete not only the codes from the vehicle's on-board computer, but also "**Freeze Frame**" data and manufacturer specific enhanced data. Further, the I/M Readiness Monitor Status for all vehicle Monitors is reset to not **RUN** or not **COMPLETE** status. Do not erase the codes before the system has been checked completely by technicians or yourself.

9. If you do wish to proceed to erase the codes, then press and release the "**SCROLL**" button once again. If the codes are cleared successfully, a "**DONE!**" message will show on the display.

ENTER
DONE!

10. When the display indicates "**5.Exit**", press "**ENTER**" button to return to the main Menu.

MENU: <---
5.EXIT



4. Diagnostic Trouble Code (DTC) Definitions

The following Diagnostic Trouble Code (DTC) definitions lists provide both VAG and SAE (OBD-II) trouble codes. For codes not listed in this table, consult the vehicle's service Manual.

VAG and SAE (OBD II) Trouble Codes

DTC (VAG)	DTC (SAE)	Definitions
00000		No DTC Recognized
00257		ABS Inlet Valve - Left Front (N101)
00258	P0753	Shift Solenoid 1 - Open Circuit or Short to Ground or B+ (N88)
00259		ABS Inlet Valve - Right Front (N99)
00260	P0758	Shift Solenoid 2 - Open Circuit or Short to Ground or B+ (N89)
00261		ABS Inlet Valve - Rear (N103)
00262	P0763	Shift Solenoid 3 - Open Circuit or Short to Ground or B+ (N90)
00263		Transmission 0107 - Mechanical/Hydraulic Malfunction
00264	P0748	Shift Solenoid 4 - Open Circuit or Short to Ground or B+ (N91)
00265		ABS Outlet Valve - Left Front (N102)
00266	P0773	Shift Solenoid 5 - Open Circuit or Short to Ground or B+ (N92)
00267		ABS Outlet - Right Front (N100)
00268	P0748	Shift Solenoid 6 - Open Circuit or Short to Ground or B+ (N93)
00269		ABS Outlet Valve - Rear (N104)
00270	P1778	Shift Solenoid 7 - Open Circuit or Short to Ground or B+ (N94)
00271		See VW or Audi Service Manual, Repair Group 01 (Depends on Which Vehicle Is under Test)
00273		ABS Inlet Valve - Right Rear (N133)
00274		ABS Outlet Valve - Left Rear (N134)
00275		ABS Outlet Valve - Right Rear (N135)
00276		ABS Outlet Valve - Right Rear (N136)
00277		ABS Inlet or Outlet Valve - Left Front (N137)
00278		ABS Main Valve (N105)
00279		Differential Lock Valve 1 (N125)
00280		Differential Lock Valve 2 (N126)
00281		Vehicle Speed Sensor - No Signal (G68)
00282		Throttle Position Actuator -V60



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DTC (VAG)	DTC (SAE)	Definitions
00283	P1711	ABS Wheel Speed Signal #1 (Left Front) - Range/Performance - G47
00284		ABS Inlet or Outlet Valve - Right Front - N138
00285	P1716	ABS Wheel Speed Signal #2 (Right Front)-Range/Performance - G45
00286		ABS Inlet or Outlet Valve - Left Front - N139
00287	P1721	ABS Wheel Speed Signal #3 (Right Rear) -Range/Performance (G44)
00289		ABS Inlet or Outlet Valve - Right Rear (N140)
00290	P1726	ABS Wheel Speed Signal #4 (Left Rear) -Range/Performance. (G46)
00291		Pressure / Fluid Level Warning Switch (F116 / F117)
00292		Hydraulic Energy Supply Pressure Level
00293	P0705	Multi-Function Transmission Range Switch - Malfunction (PRNDL Input) (F125)
00294		Transmission Pressure Switch L (F174)
00295		Transmission Pressure Switch 2 (F175)
00296	P1704	Kick-down Switch - Short to ground (F8)
00297	P0715	Input/Turbine Speed Sensor Circuit - Malfunction
00297	P0721	Vehicle Speed Sensor Circuit - Range/Performance - Signal Noisy (G38)
00297	P0722	Vehicle Speed Sensor Circuit - No Signal
00297		Transmission Vehicle Speed Sensor (G38)
00298		Rear Differential Lock Switch -E121
00299		Transmission Shift-Range Program Switch - Short Circuit -E122
00300	P0712	Transmission Fluid Temperature Sensor Circuit Low Input (G93)
00300	P0713	Transmission Fluid Temperature Sensor Circuit High Input(G93)
00301		ABS Return-flow Pump (V39)
00302		ABS Solenoid Valve Relay (J106)
00303		Board Computer Function Selector Switch (E91)
00305		Fuel Consumption Indicator Signal
00306		Secondary Air Injection - Cylinder Bank 1
00307		Secondary Air Injection - Cylinder Bank 2
00309		Cleaning Solution Metering Pump (V135)

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DTC (VAG)	DTC (SAE)	Definitions
00310		Catalytic Converter Temperature Sensors (G20)
00312		Catalytic Converter Control Temperature Sensors (G132)
00313		Three Way Catalytic Converter - Signal Malfunction
00314		EGR Two Way Valve (N161)
00447		ABS-ASR Motor - Electrical Connection 2
00501		Central Flap Motor Position Sensor -G92
00512	P0341	Cam Sensor - Signal Error
00512		Camshaft Position Sensor - Not on Reference Mark
00513	P0506	Engine Speed Sensor - G28 - Idle RPM Too Low
00513	P0507	Engine Speed Sensor - G28 - Idle RPM Too High
00513		Engine Speed Sensor - G28 - Signal Malfunction
00514	P0336	Crankshaft Position Sensor - Erratic Signal - G4
00514		Crankshaft Position Sensor - G4
00515	P0340	Camshaft Position Sensor (Hall Effect Sensor)-No Signal (G40) : Check CMP,if OK,replace distributor.
00515		Camshaft Position Sensor (Hall Effect Sensor) - Short to B+ (G40) : Check CMP,if OK,replace distributor.
00516		Throttle Position Sensor - Closed Switch -F60
00517		Throttle Position Sensor - Wide-open Switch -F81
00518	P0121	Throttle Position Sensor - Signal Out of Range (G69) Also check for loose ECM power relay.
00519	P0106	MAP Sensor - Out of Range -G71
00519	P0107	MAP Sensor - Voltage Low -G71
00519	P0108	MAP Sensor - Voltage High -G71
00520		Volume Mass Air Flow Sensor -G19ig70
00521		Co Fuel Trim Potentiometer -G74
00522		Engine Coolant Temperature Sensor -G62
00523	P0112	IAT Sensor - Temp High - Circuit Low - G42
00523	P0113	IAT Sensor - Temp Low - Circuit High - G42
00524		Knock Sensor 1 -G61
00525	P0131	O2 Sensor - Voltage Low -G39
00526		Brake Light Switch - Incorrect signal (F)
00527		Intake Air Temperature Sensor - G72
00528		Barometric Pressure Sensor - F96

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DTC (VAG)	DTC (SAE)	Definitions
00529	P0725	Engine Speed Input Circuit (RPM Sensor) - Malfunction. Also check for loose ECM power relay.
00529	P0727	Engine Speed Input Circuit (RPM Sensor) No Signal
00530		Throttle Position Sensor -G88
00531		Mass Air Flow Sensor Reference Voltage
00532	P1746	Transmission Control Module Relay - Supply Voltage (B+) Malfunction Low Battery or Bad Ground
00532	P1750	Supply Voltage (B+)
00533		Idle Air Control Regulation
00534		Oil Temperature Sensor -G8
00535		First Knock Sensor
00536		Second Knock Sensor
00537		Oxygen Sensor Control
00538		Reference Voltage
00539		Fuel Temperature Sensor -G81
00540		Knock Sensor 2 -G66
00541		Slide Travel Sensor -G99
00542		Needle Lift Sensor -G80
00543	P0726	Engine Speed Input Circuit - RPM Upper Limit Exceeded
00544		Maximum Charge Air Pressure Exceeded
00545	P1780	Engine Intervention Unreadable. Also check for loose ECM power relay.
00545	P1781	Engine Intervention Stuck Off. Also check for loose ECM power relay.
00545	P1782	Engine Intervention Stuck On. Also check for loose ECM power relay.
00546		Data Communication Line Faulty
00547		ABS Pressure Control Switch -F137
00548	P0560	System Voltage Malfunction
00549		Fuel Consumption Signal
00549	P1771	Load Signal Stuck Off (RPM Signal missing)
00549	P1772	Load Signal Stuck On (RPM Signal missing)
00550		Injection Start Control
00551		Catalytic Converter Excess Temperature

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DTC (VAG)	DTC (SAE)	Definitions
00552		Volume Air Flow Sensor (Position Sensor) -G19
00553		Mass Air Flow Sensor -G70
00554		Oxygen Sensor 2 - Control
00555		Heating Circuit - Oxygen Sensor 2 -G108
00558		Mixture Control Adjustment Limit - Lean Position
00559		Mixture Control Adjustment Limit - Rich Position
00560		EGR Temperature Sensor Switch Short or Implausible Value
00561		Mixture Adjustment Control
00575		Manifold Absolute Pressure Sensor
00577		Knock Sensor Control - Cylinder 1
00578		Knock Sensor Control - Cylinder 2
00579		Knock Sensor Control - Cylinder 3
00580		Knock Sensor Control - Cylinder 4
00581		Knock Sensor Control - Cylinder 5
00582		Knock Sensor Control - Cylinder 6
00583		Knock Sensor Control - Cylinder 7
00584		Knock Sensor Control - Cylinder 8
00585		EGR Temperature Sensor - G98
00586		EGR System Control
00587		Mixture Control Adjustment Limit - Bad ECU ground,Air leak, Leaking Injector.
00588		Air-bag Ignition Circuit - Driver Side -N95
00589		Air-bag Ignition Circuit 1 - Passenger Side -N131
00590		Air-bag Ignition Circuit 1 - Passenger Side -N132
00591		Seat Belt Tensioner Switch - E24
00592		Seat Smelt Tensioner Switch - E25
00593		Seat Detect Switch - Passenger Side -F151
00594		Air-bag Ignition Circuit
00595		Crash Data Already Stored
00596		Injector or Trans. Solenoid Wires - Short
00597	P1728	Varying ABS Wheel Speed Signals - Range/Performance
00598		Hydraulic/Mechanical Malfunction
00599		Possibility-pressure Brake Light Switch
00600		Temperature Regulator Flap Motor Position Sensor -G92

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DTC (VAG)	DTC (SAE)	Definitions
00602		Foot-wall/defroster. Flap Motor Position Sensor -G114
00603		Foot-wall/defroster Flap Motor -V85
00604		Back Pressure Flap Motor Position Sensor -G113
00605		Fresh Air Recirculation Flap Two-way Valve -N63
00606		Engine Coolant Two-way Valve -N147
00607		Outside Air Temperature Display -G106
00608		Load Sensor -G119
00609		Ignition Output 1
00610		Ignition Output 2
00611		Ignition Output 3
00612		Ignition Output 4
00613		Ignition Output 5
00614		Ignition Output 6
00615		Ignition Output 7
00616		Ignition Output 8
00617		Air-bag Deceleration Sensor - Left -G104
00618		Air-bag Deceleration Sensor - Right -G105
00619		Sensor Supply Line - Left
00620		Sensor Supply Line - Right
00621		Pressure Reduction Valve -N155
00622		Draining Water from Fuel Filter
00623		ABS/Transmission Electrical Connection
00624		A/C Compressor Engagement
00625		Vehicle Speed Signal
00626		Glow Plug Indicator Light -29
00627		Water Level Sensor -G120
00628		Actuating Variable Control
00629		Vacuum Vent Valve - Brake -F47
00630		A/C Switched on
00633		Wiring to Ignition/sensor for Delay
00634		Series Resistance -N159
00635		Oxygen Sensor Heating Circuit - Ahead of Catalytic Converter
00636		Acceleration Sensor - Right Front - G121
00637		Acceleration Sensor - Left Front - G122

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DTC (VAG)	DTC (SAE)	Definitions
00638	P1766	Throttle Angle Signal - Stuck Off. Also check for loose ECM power relay.
00638	P1767	Throttle Angle Signal - Stuck On. Also check for loose ECM power relay.
00638		Engine/Transmission Electrical Connection 2. Also check for loose ECM power relay.
00639		Deceleration Sensor -G123
00640		Oxygen Sensor Heating Relay -J278
00641		ATF-Temperature too High
00642		EDL Switch-over Valve - Right Front - N166
00643		EDL Outlet Valve - Right Front - N167
00644		EDL Switch-over Valve - Left Front -N168
00645		EDL Outlet Valve - Left Front - N169
00646		ABS-ASR Motor - Electrical Connection 1
00648		Oxygen Sensor Heating Circuit - Behind Catalytic Convertor
00649		ABS Inlet/outlet Valve - Rear -N160
00650		Clutch Vacuum Vent Valve Switch -F36
00651		Ignition Wiring
00652	P0730	Transmission Shift-Range Controller - Incorrect Gear Ratio
00652	P0731	Transmission Shift-Range Controller - Gear #1 - Incorrect Ratio
00652	P0732	Transmission Shift-Range Controller - Gear #2 - Incorrect Ratio
00652	P0733	Transmission Shift-Range Controller - Gear #3 - Incorrect Ratio
00652	P0734	Transmission Shift-Range Controller - Gear #4 - Incorrect Ratio
00653		Automatic Transmission Selector Lever
00654		Seat Belt Tensioner Igniter 1 -N153
00655		Seat Belt Tensioner Igniter 1 -N154
00656		Air-bag Seat Detect Sensor -G128
00657		Center Vent Adjusting Motor -V102
00658		Operating Module
00659		Self Test
00660		Kick-down Switch / Throttle Position Sensor
00661		Temperature Indicator
00662		Tachometer -G5
00663		Speedometer -G21

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DTC (VAG)	DTC (SAE)	Definitions
00664		Fuel Gauge
00665		Seat Belt Warning Light -K19
00666		Signal
00667		Ambient-temperature Signal
00668		Battery Power Voltage Supply (Terminal 30)
00669		Secondary Mil -K97,
00670		Throttle Position Sensor -G127
00671		Cruise Control Switch -E45 - Undefined Switch Position
00672		ABS Hydraulic Pump with Series Resistance
00673		Brake Pedal Pressed
00674		Brake Released
00675		IV-Left Front: OV OV-Left Front: OV - Left Front Wheel Locked
00676		IV-Left Front: B+ OV-Left Front: OV - Left Front Wheel Locked
00677		IV-Left Front: B+ OV-Left Front: B+ - Left Front Wheel Free
00678		IV-Left Front: B+ OV-Left Front: OV - Left Front Wheel Free
00679		Oxygen Sensor Heating Circuit in Front of Catalytic Convertor
00680		IV-Right Front: OV OV-Right Front: OV-Right Front Wheel Locked
00681		IV-Right Front: B+ OV-Right Front: OV - Right Front Wheel Locked
00682		IV-Right Front: B+ OV-Right Front: B+ - Right Front Wheel Free
00683		IV-Right Front: B+ OV-Right Front: OV - Right Front Wheel Free
00684		Oxygen Sensor Heating Circuit. Behind Catalytic Convertor
00685		IV-Left Rear: OV OV-Left Rear: OV - Left Rear Wheel Locked
00686		IV-Left Rear: B+ OV-Left Rear: OV - Left Rear Wheel Locked
00687		IV-Left Rear: B+ OV-Left Rear: B+ - Left Rear Wheel Free
00688		IV-Left Rear: B+ OV-Left Rear: OV - Left Rear Wheel Free
00689		Outside Air in Intake Air System
00690		IV-Right Rear: OV OV-Right Rear: OV - Right Rear Wheel Locked
00691		IV-Right Rear: B+ OV-Right Rear: OV - Right Rear Wheel Locked
00692		IV-Right Rear: B+ OV-Right Rear: B+ - Right Rear Wheel Free

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DTC (VAG)	DTC (SAE)	Definitions
00693		IV-Right Rear: B+ OV-Right Rear: OV - Right Rear Wheel Free
00694		Switch and Instrument Lighting
00695		Hydraulic Pump (B+) - Left Front/right Front Wheel Locked
00696		ABS Pressure Reducing Valve. -N170
00697		ABS Pressure Reducing Valve. -N171
00698		Control Module Increased Current Consumption
00699		Oxygen Sensor 1 - Behind Catalytic Converter -G130
00700		Oxygen Sensor 2 - Behind Catalytic Converter -G131
00701		ECT Overheat Test
00702		Flexible Fuel Sensor -G133
00703		CTP Recognition TPS/CTP Switch
00705		Coolant Fan Switched on
00709		Sunlight Photo Sensor 2-g134
00710		Defroster Flap Motor -V107
00711		Left Foot Well Flap Motor -V108
00712		Right Foot Well Flap Motor -V109
00713		Left Center Vent Motor -110
00714		Right Center Vent Motor -V111
00715		Rear Foot Well Vent Motor -V112
00716		Recirculation Flap Motor -V113
00717		EVAP Flap Motor -V114
00718		Upper Left Vent Switch -F179
00719		Upper Right Vent Switch -F180
00720		Lower Left Vent Switch -F181
00721		Left Right Vent Switch -F182
00722		Left Center Vent Switch -F183
00723		Right Center Vent Switch -F184
00724		Left Center Foot Well Vent Switch -F185
00725		Right Rear Foot Well Vent Switch -F186
00726		Center Rear Foot Well Vent Switch -F187
00727		Defroster Flap Motor - Position Sensor -G135
00728		Left Center Vent Motor - Position Sensor -G136
00729		Right Center Vent Motor - Position Sensor -G137
00730		Center Vent Motor - Position Sensor -G138
00731		Left Foot Well Flap Motor - Position Sensor -G139

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DTC (VAG)	DTC (SAE)	Definitions
00732		Right Foot Well Flap Motor - Position Sensor -G140
00733		Rear Foot Well Left Vent Motor - Position Sensor -G141
00734		Center Vent Position Sensor -G142
00735		Recirculation Flap Position Sensor -G143. * If this code is found on late model VR6 (AAA) refer to code #01247.
00736		EVAP Flap Motor. Position Sensor -G144
00737		Left Heat Regulating Valve -N175
00738		Rear Heat Regulating Valve -N176
00739		Coolant Pump -V50
00740		Cylinder 1 CKP Sensor -G145
00741		Brake Pedal Position Status Monitoring
00742		Battery Ventilation System
00743		Battery Ventilation Sensor -G146
00744		Battery Temperature Regulation
00745		Insulation Status Monitoring
00746		Battery Cell Failure
00747		Front Battery Temperature Sensor -G52
00748		Rear Battery Temperature Sensor -G53
00749		Ventilation Flap
00750		Fault Lamp Circuit
00751		Battery Capacity Indicator
00752		Fan and Battery Heating
00753		Electrical Connector - Wheel Speed Sensor
00754		ECT Warning Light
00755		Engine Oil Pressure Warning Light -K3
00756		Left Vent Temperature Sensor -G150
00757		Left Vent Temperature Censor -G151
00758		Secondary Air Injection System (Air)
00759		Left Vent Temperature Regulator -G155
00760		Right Vent Temperature Regulator (Actuator) -G156
00761		Diagnostic Trouble Code Stored in Control Unit
00762		Fuel Injector(s) -N181
00763		Driver Side Gas Pressure Sensor -G147
00764		Passenger Side Gas Pressure Sensor -G148
00765		Slide Control Travel (Piston Displacement) Sensor -G149

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DTC (VAG)	DTC (SAE)	Definitions
00766		Front Vent Temperature Sensor -G12
00767		Rear Evaporator Temperature Sensor R-g153
00768		Rear Heater Core Temperature Sensor -G154
00769		Engine Coolant Temperature Sensor -G82
00770		Engine Coolant Temperature Sensor -G83
00771		Fuel Level Sensor -G
00772		Oil Pressure Switch -F22
00773		Oil Pressure Sensor -G10
00774		Level Control System Sensor - Left Rear - G76
00775		Level Control System Sensor - Right Rear - G77
00776		Level Control System Sensor - Left Front - G78
00777		Throttle Position Sensor -G79
00778		Steering Angle Sensor -G85
00779		Outside Air Temperature Sensor -G17
00780		Vertical Motion Sensor -G90
00781		Positioning Motor - Left Front -V76
00782		Positioning Motor - Right Front - V77
00783		Positioning Motor - Left Front - V78
00784		Positioning Motor - Right Rear - V79
00785		Temperature Sensor - Instrument Panel -G56
00786		Temperature Sensor - in Headliner -G86
00787		Fresh Air Intake Duct Temperature Sensor -G89
00788		Foot Well/defrost Flap Two-wag Valve -N118
00789		Backup Switch -F41
00790		Recirculating/fresh Air Flap
00791		Air Conditioner Evaporator Temperature Switch -G33
00792		Air Conditioner Pressure Switch -F129
00793		Brake Pedal Position Sensor -G100
00794		Hydraulic Pump Sensor -G101
00795		Rear Axle Vertical Acceleration Sensor -G102
00796		Fan for Integer Temperature Sensor -V42
00797		Sunlight Photo Sensor -G107
00798		Segment Test
00799		Engine Coolant Temperature Sensor -G110
00800		Ambient Temperature Sensor Fresh Air Blower -G109

OBD2 CODE READER



OWNER'S MANUAL

DTC (VAG)	DTC (SAE)	Definitions
00801		A/C Refrigerant High Pressure Switch -F11b
00802		A/C Refrigerant Low Pressure Switch -F73
00803		Coil Spring Travel Sensor - Right Front - G118
00804		Coil Spring Trawl Sensor - Left Front -G115
00805		Suspension Strut Valve - Left Front - N148
00806		Suspension Strut Valve - Right Front - N149
00807		Suspension Strut Valve - Left Front - N150
00808		Suspension Shut Valve - Right Rear - N151
00811		System Not Ready for Activation
00824		Traction Control Indicator Light -K86
01016		Gas-filled Suspension Bleeder Valve -N106
01017		Gas-filled Suspension System Compressor -V65
01018		Coolant Fan -V7
01019		Relay
01020		Water Pump -V36
01021		Differential Lock Indicator Light -K81
01022		Interior Light - Combination Figure Activated
01023		Warning Buzzer -H3
01025		Malfunction Indicator Lamp Faulty
01027		Rear Warm Air Fan -V47
01028		Fan Relay -J323
01028		Rear Evaporator Fan -V20
01029		A/C Relay -J32
01039		ECT Sensor -G2
01040		ABS/Transmission Electrical Connection 2
01041		Traction Control System - Function Unreadable
01044	P1749	Transmission Control Module - Incorrectly Coded
01045		Tiptronic Switch -F189
01046		Broke Pod Wear Indicator Light -L32
01047		Brake and Parking Brake Warning Light -Kt
01048		Diesel Electronic Warning Light -K104
01049		Supply Voltage (Terminal 50)
01050		Glow Plug Status Monitoring
01051		Fuel MC Positioning Motor -V117
01052		Throttle Position Sensor -G157

OWNER'S MANUAL



DTC (VAG)	DTC (SAE)	Definitions
01053		Injection Start-valve -N182
01054		Power Supply Relay (Terminal 30) -J317
01055		Injection Start-sensor -G158
01057		Function - Constant Charge - Voltage
01058		Function - Constant Charge - Current
01059		Rotor Position Sensor -G159
01060		Ignition Coil Lower Temperature Sensor -G160
01061		Ignition Coil Upper Temperature Sensor -G161
01070		Starter Relay -J53
01071		Clutch Pedal Position Sensor -G162
01072		Clutch Position - Vacuum Valve -N183
01073		Clutch Pressure System
01074		Clutch Position - Vent Valve
01075		Vacuum Pump Relay -J320
01076		Hydraulic Pump Clutch Relay -J319
01077		Brake Booster Vacuum Switch -F190
01078		TR Gear Selector Switch -F191
01079		Power Steering Relay -J320
01080		Power Steering Pressure Switch -F192
01081		Priority Switch Valve -N185
01082		Low Fuel Level Warning Light -K105
01083		Low Windshield Fluid - Windshield Fluid Indicator Light or Sensor -K106
01084		32oF (0o) Freeze Temperature Warning Light -K107
01085		39oF (4o) Temperature Warning Light -K108
01086		Speedometer - Vehicle Speed Sensor -G22
01087		Basic Setting Not Performed
01088		Mixture Control Adjustment 2
01089		Tensioning Bow Raised Position Switch -F204
01090		Tensioning Bow Stowed Position Switch -F203
01091		Convertible Top Closed Position Switch -F202
01092		Convertible Top Open Position Switch -F171
01093		Compartment Cover Open Position Switch -F201
01094		Compartment Cover Left Switch 3-F195
01095		Compartment Cover Unlocked Left Switch 2-F197

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OWNER'S MANUAL

DTC (VAG)	DTC (SAE)	Definitions
01096		Compartment Cover Locked Left Switch 1-F199
01097		Convertible Top Front Lock Switch -F172
01098		Trunk Lid Closed Position Switch -F206
01099		Luggage Compartment Switch (Locked)
01100		Luggage Compartment Switch (Unlocked)
01101		Convertible Top Latch Open Position Switch -F205
01102		Compartment Cover Right Switch 3-F196
01103		Compartment Cover Unlocked Right Switch 2-F198
01104		Compartment Cover Locked Right Switch 1-F200
01105		Solenoid Valve 8-N186
01106		Power Window Opening Relay -J291
01107		Convertible Top Locked Indicator Light -K98
01108		Power Window Closing Relay -J292
01109		Convertible Top Hydraulic Pump Relay -J321
01110		Convertible Top Unlocking Solenoid -N187
01111		Luggage Compartment Lock Actuator Motor 1
01112		Actuator Motor 1 and 2 Power Supply
01113		Luggage Compartment Lock Actuator Motor 2
01114		Parking Brake Warning Light Switch -F9
01115		Just 3 Byte Space
01116		Convertible Top Unlocking Actuator Motor
01117		Generator Terminal DF Load Signal
01118		Engine Pre-heating Circuit
01119		Transmission Shift-Range Gear Position Signal
01120		Camshaft Adjustment 1
01121		Camshaft Adjustment 2
01122		Camshaft Position Sensor 2-G163
01123		Triggering Faulty
01124		Charge Time Status Monitoring
01125		Intake Manifold Change-over
01126		Engine Speed Signal
01127		Reserve Fuel Indicating Lamp
01128		Anti-theft System - Immobilizer Sensor -D2
01129		S-terminal -H15
01130		ABS Operation - Signal outside range of tolerance

OWNER'S MANUAL



DTC (VAG)	DTC (SAE)	Definitions
01131		Blinking Light Activation
01132		Front Infrared Sensor -G166
01133		Rear Infrared Sensor -G167
01134		Alarm Horn -12
01135		Vehicle Interior-motion Sensor
01136		Engine Start Interrupt
01137		Central Locking Contact Switch
01138		Central Locking - Drivers Door Unlock
01139		Central Locking - Passenger Door Unlock
01140		Central Locking - Trunk Lid Unlock
01141		Trunk Lid Release Switch Motor
01142		Central Locking - Unlocking Motor
01143		Central Locking - Opening Motor
01144		Central Locking - Opening Motor
01145		Central Locking - Opening Motor
01146		Central Locking - Closing Motor
01147		Central Locking - Trunk Lid Release Motor -V120
01148		Save Fuse Door - Activation
01149		Save Fuse Door - Deactivating
01150		Analog Indicator
01151		Diesel Engine Safety Switch -F207
01152		TR Gear Monitoring Switch -F209
01153		E- (Economic) Switch - E163
01154		Clutch System Pressure Switch -F210
01155		Clutch, Mechanics
01156		TR Gear Recognition Switch -F208
01157		Alarm Horn Voltage Supply
01158		Turn Signal Voltage Supply
01159		Save Fuse Wiring
01160		Coolant Glow Plug Relay -J325
01165		Throttle Body Control Module -J338
01166		Engine Torque Signal
01167		Wide Open Throttle Stop - Throttle Stop Valve -N194
01168		Idle Rpm Increase Valve -N177
01169		Door Contact Switch - Driver Side -F2

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OWNER'S MANUAL

DTC (VAG)	DTC (SAE)	Definitions
01170		Fuel Injection Duration Sensor -G175
01172		Seat Heating Temperature Sensor - Driver Side -G59
01173		Longitudinal Adjustment Motor - Driver Side -V28
01174		Height Seat Adjustment - Driver Side -V38
01175		Heated Seat Adjustment - Driver Side - E94
01176		Key Faulty
01177		Engine Control Unit
01179		Incorrect Key Entry
01180		Engine / A/C - Electrical Connection
01181		Initializing - Only 2 Keys Pressed
01182		Height Adaptation
01183		Catalytic Converter Warning Lamp -K72
01184		Outlet Temperature Sensor -G174
01185		Fresh Air Blower - Rear -V80
01186		Rear Air Distribution Servo Motor -V136
01187		Rear Temperature Flap Servo Motor -V137
01188		Control Module Solenoid - Electrical Connector
01190		Control Module Actuator Motor - Electrical Connector
01192		Torque Converter Clutch
01193		Low Heat Output -J359
01194		High Heat Output -J360
01196		Engine/Transmission Can Bus
01197		Engine/Transmission Can Bus - Wire-A
01198		Engine/Transmission Can Bus - Wire-B
01199		Engine/ABS Electrical Connection
01200		ABS Valves Voltage Supply - Fuse S54
01201		ABS Pump Voltage Supply - Fuse S53
01202		Diagnostic Wire
01208		Data Record Changes - VIN
01235		Secondary Air Injection - Solenoid Valve -N112
01236		Shift-Lock Solenoid -N110
01237		Fuel Cut-off Valve -N109
01238		Ignition Timing (Spark Angle) Control
01239		Throttle Position Actuator Vent Valve -N97
01240		Throttle Position Actuator Breather Valve -N117

OWNER'S MANUAL



DTC (VAG)	DTC (SAE)	Definitions
01241		EVAP Canister Purge Solenoid Valve -N115
01242		Final Stage in Control Unit
01243		Intake Manifold Change-over Valve -Nix
01244		Heating Oxygen Sensor Control Module -J208
01245		Differential Pressure Regulator -N73
01246		Early Fuel Evaporation Relay -J81
01247		EVAP Canister Purge Regulator Valve -N80
01248		Wide Open Throttle Enrichment Two-way Valve -N54
01249	P0201	Cylinder 1 - Injector Fault -N30
01250	P0202	Cylinder 2 - Injector Fault -N31
01251	P0203	Cylinder 3 - Injector Fault -N32
01252	P0204	Cylinder 4 - Injector Fault -N33
01253	P0205	Cylinder 5 - Injector Fault -N83
01254	P0206	Cylinder 6 - Injector Fault -N84
01255	P0207	Cylinder 7 - Injector Fault -N85
01256	P0208	Cylinder 8 - Injector Fault -N86
01257		Idle Air Control Valve -N71
01258		Air Flap Positioner -V63
01259		Fuel Pump Relay Circuit -J17
01260		Deceleration Fuel Cut-off Valve -N55
01261		Oxygen Sensor Frequency Valve -N7
01262		Wastage Bypass Regulator Valve -N75
01263		Cold Start Injector -N17
01264		Secondary Air Injection Pump Relay -J299
01265		EGR Vacuum Regulator Solenoid Valve -N18
01266		Glow Plug Relay -J52
01267		Automatic Glow Time Control Unit -J179
01268		Quantity Adjuster -N146
01269		Injection Start Valve -N108
01270		A/C Compressor Clutch -N25
01271		Temperature Regulator Flap Motor -V68
01272		Central Air Flap Motor -V70
01273		Fresh Air Blower - V2
01274		Air Flow Flap Motor - V71
01275		Solenoid Relay

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OWNER'S MANUAL

DTC (VAG)	DTC (SAE)	Definitions
01276		ABS Hydraulic Pump - V64
01277		ABS Hydraulic Pump Relay -J185
01278		Electronic Differential Lock Cut-off Relay -J263
16486	P0102	Mass or Volume Air Flow Circuit - Low input
16487	P0103	Mass or Volume Air Flow Circuit - High Input. May be due to a low battery if found with 17988 (P1580)
16496	P0112	IAT Sensor - Temp High - Circuit Low - G42
16497	P0113	IAT Sensor - Temp Low - Circuit High - G42
16500	P0116	Engine Coolant Temperature Circuit - Range/ Performance Problem
16501	P0117	Engine Coolant Temperature Circuit - Low Input (High Temp)
16502	P0118	Engine Coolant Temperature Circuit - High Input (Low Temp)
16504	P0120	Throttle Position Sensor A - Circuit Malfunction
16505	P0121	Throttle Position Sensor A - Circuit - Performance Problem - Out of Range
16506	P0122	Throttle Position Sensor A Circuit - Low Voltage Input
16507	P0123	Throttle Position Sensor A Circuit - High Voltage Input
16509	P0125	Cooling System - Temp Too Low to Enter Closed Loop - G62
16514	P0130	O2 Sensor Circuit - Malfunction (Bank 1 Sensor 1)
16515	P0131	O2 Sensor Circuit - Voltage Low (Bank 1 Sensor 1)
16516	P0132	O2 Sensor Circuit - High Voltage (Bank 1 Sensor 1)
16517	P0133	O2 Sensor Circuit - Slow Response (Bank 1 Sensor 1)
16518	P0134	O2 Sensor Circuit - No Activity Detected (Bank 1 Sensor 1)
16519	P0135	O2 Sensor Heater Circuit - Malfunction (Bank 1 Sensor 1)
16520	P0136	O2 Sensor Circuit - Malfunction (Bank 1 Sensor 2)
16521	P0137	O2 Sensor Circuit - Low Voltage (Bank 1 Sensor 2)
16522	P0138	O2 Sensor Circuit - High Voltage (Bank 1 Sensor 2)
16524	P0140	O2 Sensor Circuit - Slow Response (Bank 1 Sensor 2)
16525	P0141	O2 Sensor Heater Circuit - Malfunction (Bank 1 Sensor 2)
16534	P0150	O2 Sensor Circuit - Malfunction (Bank 2 Sensor 1)
16536	P0152	O2 Sensor Circuit - High Voltage (Bank 2 Sensor 1)
16537	P0153	O2 Sensor Circuit - Slow Response (Bank 2 Sensor 1)
16538	P0154	O2 Sensor Circuit - No Activity Detected (Bank 2 Sensor 1)
16539	P0155	O2 Sensor Heater Circuit - Malfunction (Bank 2 Sensor 1)
16540	P0156	O2 Sensor Circuit - Malfunction (Bank 2 Sensor 2)

OWNER'S MANUAL



DTC (VAG)	DTC (SAE)	Definitions
16542	P0158	O2 Sensor Circuit - High Voltage (Bank 2 Sensor 2)
16543	P0159	O2 Sensor Circuit - Slow Response (Bank 2 Sensor 2)
16544	P0160	O2 Sensor Circuit - No Activity Detected (Bank 2 Sensor 2)
16545	P0161	O2 Sensor Heater Circuit - Malfunction (Bank 2 Sensor 2)
16554	P0170	Fuel Trim - Malfunction (Bank 1)
16555	P0171	Fuel Trim - System Lean (Bank 1)
16556	P0172	Fuel Trim - System Rich (Bank 1)
16557	P0173	Fuel Trim - Malfunction (Bank 2)
16558	P0174	Fuel Trim - System Lean (Bank 2)
16559	P0175	Fuel Trim - System Rich (Bank 2)
16684	P0300	Random Misfire Detected - Any Cylinder
16685	P0301	Cylinder #1 - Misfire Detected
16686	P0302	Cylinder #2 - Misfire Detected
16687	P0303	Cylinder #3 - Misfire Detected
16688	P0304	Cylinder #4 - Misfire Detected
16689	P0305	Cylinder #5 - Misfire Detected
16690	P0306	Cylinder #6 - Misfire Detected
16691	P0307	Cylinder #7 - Misfire Detected
16692	P0308	Cylinder #8 - Misfire Detected
16706	P0322	Ignition/Distributor Engine Speed Input Circuit - No Signal
16711	P0327	Knock Sensor #1 Circuit - Low Input (Bank 1 or Single Sensor)
16716	P0332	Knock Sensor #2 Circuit - Low Input (Bank 2)
16721	P0337	Crankshaft Position Sensor Circuit - Low Input
16725	P0341	Camshaft Position Sensor Circuit - Out of Range/ Performance
16784	P0400	Exhaust Gas Recirculation (EGR) - Flow Malfunction
16785	P0401	Exhaust Gas Recirculation (EGR) - Flow Insufficient
16786	P0402	Exhaust Gas Recirculation (EGR) - Flow Excessive
16795	P0411	Secondary Air Injection System (B2) - Incorrect Flow
16806	P0422	Main Catalyst Efficiency - Below Threshold (Bank 1)
16816	P0432	Main Catalyst Efficiency - Below Threshold (Bank 2)
16824	P0440	Evaporative Emission Control System (EVAP) - Purge Malfunction
16825	P0441	Evaporative Emission Control System - Incorrect Purge Flow
16826	P0442	Evaporative Emission Control System - Leak Detected (small leak)

OBD2 CODE READER



OWNER'S MANUAL

DTC (VAG)	DTC (SAE)	Definitions
16836	P0452	Evaporative Emission Control System - Pressure Sensor - Low Input
16837	P0453	Evaporative Emission Control System - Pressure Sensor - High Input
16839	P0455	Evaporative Emission Control System - Leak Detected (gross leak)
16845	P0461	Fuel Level Sensor Circuit - Range/Performance
16885	P0501	Vehicle Speed Sensor - Range/Performance
16890	P0506	Idle Control Module - RPM Lower Than Expected
16891	P0507	Idle Control Module - RPM Higher Than Expected
16894	P0510	Throttle Position Sensor - Closed Switch
16989	P0605	Internal Control Module Read Only Memory (EPROM) Error
17090	P0706	Transmission Range Sensor Circuit - Range/Performance
17091	P0707	Transmission Range Sensor Circuit - Low Input
17509	P1101	O2 Sensor Circuit (B1-S1) Voltage Too Low/Air Leak
17510	P1102	O2 Sensor Circuit Heating Circuit (B1-S1) - Short to B+
17511	P1103	O2 Sensor Circuit Heating Circuit (B1-S1) - Output Too Low
17512	P1104	O2 Sensor Circuit (B1-S2) Voltage Too Low - Air Leak
17513	P1105	O2 Sensor Circuit Heating Circuit (B1-S2) -Short to B+
17514	P1106	O2 Sensor Circuit (B2-S1) Voltage Too Low - Air Leak
17515	P1107	O2 Sensor Circuit Heating Circuit (B2-S1) - Short to B+
17516	P1108	O2 Sensor Circuit Heating Circuit (B2-S1) - Output too Low
17517	P1109	O2 Sensor Circuit (B2-S2) Voltage Too Low - Air Leak
17518	P1110	O2 Sensor Circuit Heating Circuit (B2-S2) - Short to B+
17535	P1127	Long Term Fuel Trim - System too Rich (Bank 1)
17536	P1128	Long Term Fuel Trim - System too Lean (Bank 1)
17609	P1201	Cylinder #1 Fuel Injector Circuit - Electrical Malfunction
17610	P1202	Cylinder #2 Fuel Injector Circuit - Electrical Malfunction
17611	P1203	Cylinder #3 Fuel Injector Circuit - Electrical Malfunction
17612	P1204	Cylinder #4 Fuel Injector Circuit - Electrical Malfunction
17613	P1205	Cylinder #5 Fuel Injector Circuit - Electrical Malfunction
17614	P1206	Cylinder #6 Fuel Injector Circuit - Electrical Malfunction
17615	P1207	Cylinder #7 Fuel Injector Circuit - Electrical Malfunction
17616	P1208	Cylinder #8 Fuel Injector Circuit - Electrical Malfunction
17621	P1213	Cylinder #1 Fuel Injector Circuit - Short to B+

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DTC (VAG)	DTC (SAE)	Definitions
17622	P1214	Cylinder #2 Fuel Injector Circuit - Short to B+
17623	P1215	Cylinder #3 Fuel Injector Circuit - Short to B+
17624	P1216	Cylinder #4 Fuel Injector Circuit - Short to B+
17625	P1217	Cylinder #5 Fuel Injector Circuit - Short to B+
17626	P1218	Cylinder #6 Fuel Injector Circuit - Shod to B+
17627	P1219	Cylinder #7 Fuel Injector Circuit - Shod to B+
17628	P1220	Cylinder #8 Fuel Injector Circuit - Shod to B+
17633	P1225	Cylinder #1 Fuel Injector Circuit - Short to Ground
17634	P1226	Cylinder #2 Fuel Injector Circuit - Short to Ground
17635	P1227	Cylinder #3 Fuel Injector Circuit - Short to Ground
17636	P1228	Cylinder #4 Fuel Injector Circuit - Short to Ground
17637	P1229	Cylinder #5 Fuel Injector Circuit - Short to Ground
17638	P1230	Cylinder #6 Fuel Injector Circuit - Short to Ground
17639	P1231	Cylinder #7 Fuel Injector Circuit - Short to Ground
17640	P1232	Cylinder #8 Fuel Injector Circuit - Short to Ground
17645	P1237	Cylinder #1 Fuel Injector Circuit - Open Circuit
17646	P1238	Cylinder #2 Fuel Injector Circuit - Open Circuit
17647	P1239	Cylinder #3 Fuel Injector Circuit - Open Circuit
17648	P1240	Cylinder #4 Fuel Injector Circuit - Open Circuit
17649	P1241	Cylinder #5 Fuel Injector Circuit - Open Circuit
17650	P1242	Cylinder #6 Fuel Injector Circuit - Open Circuit
17651	P1243	Cylinder #7 Fuel Injector Circuit - Open Circuit
17652	P1244	Cylinder #8 Fuel Injector Circuit - Open Circuit
17656	P1250	Fuel Level Too Low
17733	P1325	Cylinder #1 Knock Control Limit Attained
17734	P1326	Cylinder #2 Knock Control Limit Attained
17735	P1327	Cylinder #3 Knock Control Limit Attained
17736	P1328	Cylinder #4 Knock Control Limit Attained
17737	P1329	Cylinder #5 Knock Control Limit Attained
17738	P1330	Cylinder #6 Knock Control Limit Attained
17739	P1331	Cylinder #7 Knock Control Limit Attained
17740	P1332	Cylinder #8 Knock Control Limit Attained
17747	P1339	Crankshaft Position/Engine Speed Sensors Cross connected
17748	P1340	Camshaft/Crankshaft Position Sensors(B2) - Out of Sequence

OBD2 CODE READER



OWNER'S MANUAL

DTC (VAG)	DTC (SAE)	Definitions
17749	P1341	Ignition Coil Power Output Stage #1 - Short to Ground
17751	P1343	Ignition Coil Power Output Stage #2 - Short to Ground
17753	P1345	Ignition Coil Power Output Stage #3 - Short to Ground
17799	P1391	Camshaft Position Sensor (B2) - Short to Ground
17800	P1392	Camshaft Position Sensor Open (B2) - Short to B+
17801	P1393	Ignition Coil Power Output Stage #1 - Electrical Malfunction
17802	P1394	Ignition Coil Power Output Stage #2 - Electrical Malfunction
17803	P1395	Ignition Coil Power Output Stage #3 - Electrical Malfunction
17804	P1396	Engine Speed Sensor - Missing Tooth
17808	P1400	EGR Valve Circuit - Electrical Malfunction
17809	P1401	EGR Valve Circuit - Power Stage Short to Ground
17810	P1402	EGR Valve Circuit - Short to B+
17815	P1407	EGR Temperature Sensor - Signal too Low
17816	P1408	EGR Temperature Sensor - Signal too High
17817	P1409	Tank Ventilation Valve - Electrical Malfunction
17818	P1410	Tank Ventilation Valve - Short to B+
17819	P1411	Secondary Air Injection System (B2) - Restricted Flow
17822	P1414	Secondary Air Injection System (B2) - Leak Detected
17826	P1418	Fuel Level Sensor - Signal too High
17828	P1420	Secondary Air Injection System Control Module - Electrical Malfunction
17829	P1421	Secondary Air Injection System Control Valve Circuit - Short to Ground
17830	P1422	Secondary Air Injection System Control Valve Circuit - Short to B+
17831	P1423	Secondary Air Injection System (B1) - Flow too Low
17832	P1424	Secondary Air Injection System (B1) - Leak Detected
17833	P1425	Tank Ventilation Valve - Short to Ground
17834	P1426	Tank Ventilation Valve - Open Circuit
17842	P1434	Secondary Air Injection System Pump Relay Circuit - Short to B+
17844	P1436	Secondary Air Injection System Pump Relay Circuit - Electrical Malfunction
17848	P1440	EGR Valve Circuit - Power Stage Open

OWNER'S MANUAL



DTC (VAG)	DTC (SAE)	Definitions
17858	P1450	Secondary Air Injection System Pump Relay Circuit - Short to B+
17859	P1451	Secondary Air Injection System Pump Relay Circuit - Short to Ground
17860	P1452	Secondary Air Injection System Pump Relay Circuit - Open Circuit
17878	P1470	EVAP Emission Control System L.D.P Circuit - Malfunction
17879	P1471	EVAP Emission Control System L.D.P. Circuit - Short to B+
17883	P1475	EVAP Emission Control System L.D.P. - Malfunction Signal Circuit open
17884	P1476	EVAP Emission Control System L.D.P. -Malfunction/ Insufficient Vacuum
17908	P1500	Fuel Pump Relay Circuit - Electrical Malfunction
17910	P1502	Fuel Pump Relay Circuit - Short to B+
17912	P1504	Intake Air System Bypass Air Determined
17913	P1505	CTP Switch not Closing - Open Circuit
17914	P1506	CTP Switch not Opening - Short to Ground
17917	P1509	IAC Circuit - Electrical Malfunction
17918	P1510	IAC Circuit - Short to B+
17919	P1511	Intake Manifold Changeover Valve Circuit Electrical Malfunction
17920	P1512	Intake Manifold Changeover Valve Circuit - Short to B+
17951	P1543	Throttle Actuation Potentiometer - Signal too Low
17952	P1544	Throttle Actuation Potentiometer - Signal too High
	P1545	
	P1559	
17988	P1580	Throttle Actuator (B1) Fault - May be caused by low found with 16487 (P0103)
17990	P1582	Idle Adaption at Limit
18008	P1600	Power Supply (B+) Terminal 15 - Low Voltage
18010	P1602	Power Supply (B+) Terminal 30 - Low Voltage
18014	P1606	Rough Road Spec. Engine Torque ABS-SG - Electrical Malfunction
18019	P1611	MIL Call-up Circuit/Transmission Control Module - Short to Ground
18020	P1612	ECM - Incorrectly Coded

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DTC (VAG)	DTC (SAE)	Definitions
18021	P1613	MIL Call-up - Circuit Open or Short to B+
65535	P0603	Control Unit Failure or Internal Control Module Keep Alive Memory (KAM) Error or Power Failure to Control Unit or Bad Ground Contacts or No Faults Recorded (If MIL Not Illuminated)
65535		No Faults Recorded (If MIL Not Illuminated)
65535		Control Unit Faulty (In Some Systems)
	P0217	Temp Light - Engine Hot
	P0218	Temp Light - Transaxle Hot
	P0326	Knock Sensor - Constant Knock
	P0351	Ignition - Faulty
	P0352	Ignition - Faulty
	P0420	Converter - Low Efficiency
	P0443	EVAP Purge - Circuit Fault
	P0500	VSS Sensor - No Signal
	P0560	Battery Voltage - Out of Range
	P0561	Battery Voltage - Unstable
	P0562	Battery Voltage - Low
	P0563	Battery Voltage - High
	P0565	Cruise Control - Circuit Fault
	P0571	Brake Switch - Circuit Fault
	P0572	Brake Switch - Low Voltage
	P0573	Brake Switch - High Voltage
	P0600	PCM - No Serial Data
	P0601	EPROM - Fault
	P0602	PCM Program - Fault
	P0604	PCM RAM Memory - Fault
	P0606	PCM Processor - Fault
	P1782	Engine/Transmission Data Electrical Connection Ignition Intervention. Also check for loose ECM power relay.



5. Warranty and Service

5.1 Limited One Year Warranty

We warrant to its customers that this product will be free from all defects in materials and workmanship for a period of one (1) year from the date of the original purchase, subject to the following terms and conditions:

1. The sole responsibility of us under the Warranty is limited to either the repair or, at the option of us, replacement of the code reader at no charge with Proof of Purchase. The sales receipt may be used for this purpose.

2. This warranty does not apply to damages caused by improper use, accident, flood, lightning, or if the product was altered or repaired by anyone other than the Manufacturer's Service Center.

3. We shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the code reader. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

5.2 Service Procedures

If you have any questions, please contact your local store or distributor. If it becomes necessary to return the code reader for repair, contact your local distributor for more information.



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